

Supplementary Information

Phytochemistry and Biological Activities of *Iris* Species Growing in Iraqi Kurdistan and Phenolic Constituents of the Traditional Plant *Iris postii*

**Hawraz Ibrahim M. Amin, Faiq H. S. Hussain, Soran K. Najmaldin, Zaw Min Thu,
Mohammed F. Ibrahim, Gianluca Gilardoni and Giovanni Vidari**

Spectroscopic data of isolated compounds

NMR and MS spectra of androsin (66)

Figure S1. ^1H -NMR spectrum (300 MHz, CD_3OD) of androsin	page 3
Figure S2. ^{13}C -NMR spectrum (75 MHz, CD_3OD) of androsin	page 4
Figure S3. ESI-MS (positive ion mode) spectrum of androsin	page 5

NMR and MS spectra of isovitexin (109)

Figure S4. ^1H -NMR spectrum (300 MHz, CD_3OD) of isovitexin	page 6
Figure S5. ^{13}C -NMR spectrum (75 MHz, CD_3OD) of isovitexin	page 7
Figure S6. ESI-MS (positive ion mode) spectrum of isovitexin	page 8
Figure S7. ESI-MS (negative ion mode) spectrum of isovitexin	page 9

NMR and MS spectra of swertisin (111)

Figure S8. ^1H -NMR spectrum (300 MHz, CD_3OD) of swertisin	page 10
Figure S9. ^{13}C -NMR spectrum (75 MHz, CD_3OD) of swertisin	page 11
Figure S10. ^{13}C -NMR spectrum (75 MHz, $\text{C}_5\text{D}_5\text{N}$) of swertisin	page 12
Figure S11. ESI-MS (positive ion mode) spectrum of swertisin	page 13
Figure S12. ESI-MS (negative ion mode) spectrum of swertisin	page 14

NMR and MS spectra of 2"-O- α -L-rhamnosyl swertisin (112)

Figure S13. ^1H -NMR spectrum (300 MHz, CD_3OD) of 2"-O- α -L-rhamnosyl swertisin	page 15
Figure S14. COSY spectrum of 2"-O- α -L-rhamnosyl swertisin	page 16
Figure S15. ^{13}C -NMR spectrum (75 MHz, CD_3OD) of 2"-O- α -L-rhamnosyl swertisin	page 17
Figure S16. HSQC spectrum of 2"-O- α -L-rhamnosyl swertisin	page 18
Figure S17. HMBC spectrum of 2"-O- α -L-rhamnosyl swertisin	page 19
Figure S18. HMBC spectrum (enlargement 1) of 2"-O- α -L-rhamnosyl swertisin	page 20
Figure S19. HMBC spectrum (enlargement 2) of 2"-O- α -L-rhamnosyl swertisin	page 21
Figure S20. NOESY spectrum of 2"-O- α -L-rhamnosyl swertisin	page 22
Figure S21. ESI-MS spectra (positive and negative ion mode) of 2"-O- α -L-rhamnosyl swertisin	page 23

NMR and MS spectra of tryptophan

Figure S22. ^1H -NMR spectrum (300 MHz, CD ₃ OD) of tryptophan	page 24
Figure S23. ^{13}C -NMR spectrum (75 MHz, CD ₃ OD) of tryptophan	page 25
Figure S24. ESI-MS (positive ion mode) spectrum of tryptophan	page 26

NMR and MS spectra of isotectorigenin (115)

Figure S25. ^1H -NMR spectrum (300 MHz, CD ₃ OD) of isotectorigenin	page 27
Figure S26. ^{13}C -NMR spectrum (75 MHz, CD ₃ OD) of isotectorigenin	page 28
Figure S27. ESI-MS (positive ion mode) spectrum of isotectorigenin	page 29
Figure S28. ESI-MS (negative ion mode) spectrum of isotectorigenin	page 30

NMR and MS spectra of trans- ε -viniferin (113)

Figure S29. ^1H -NMR spectrum (300 MHz, CD ₃ OD) of <i>trans</i> - ε -viniferin	page 31
Figure S30. ^{13}C -NMR spectrum (75 MHz, CD ₃ OD) of <i>trans</i> - ε -viniferin	page 32
Figure S31. ESI-MS (positive ion mode) spectrum of <i>trans</i> - ε -viniferin	page 33
Figure S32. ESI-MS (negative ion mode) spectrum of <i>trans</i> - ε -viniferin	page 34

NMR and MS spectra of resveratrol 3,4'-O-di- β -D-glucopyranoside (114)

Figure S33. ^1H -NMR spectrum (300 MHz, CD ₃ OD) of resveratrol	
3,4'-O-di- β -D-glucopyranoside	page 35
Figure S34. ^{13}C -NMR spectrum (75 MHz, CD ₃ OD) of resveratrol	
3,4'-O-di- β -D-glucopyranoside	page 36
Figure S35. HSQC spectrum of resveratrol 3,4'-O-di- β -D-glucopyranoside	page 37
Figure S36. HMBC spectrum of resveratrol 3,4'-O-di- β -D-glucopyranoside	page 38
Figure S37. NOESY spectrum of resveratrol 3,4'-O-di- β -D-glucopyranoside	page 39
Figure S38. ESY-MS spectrum (positive ion mode) of resveratrol	
3,4'-O-di- β -D-glucopyranoside	page 40

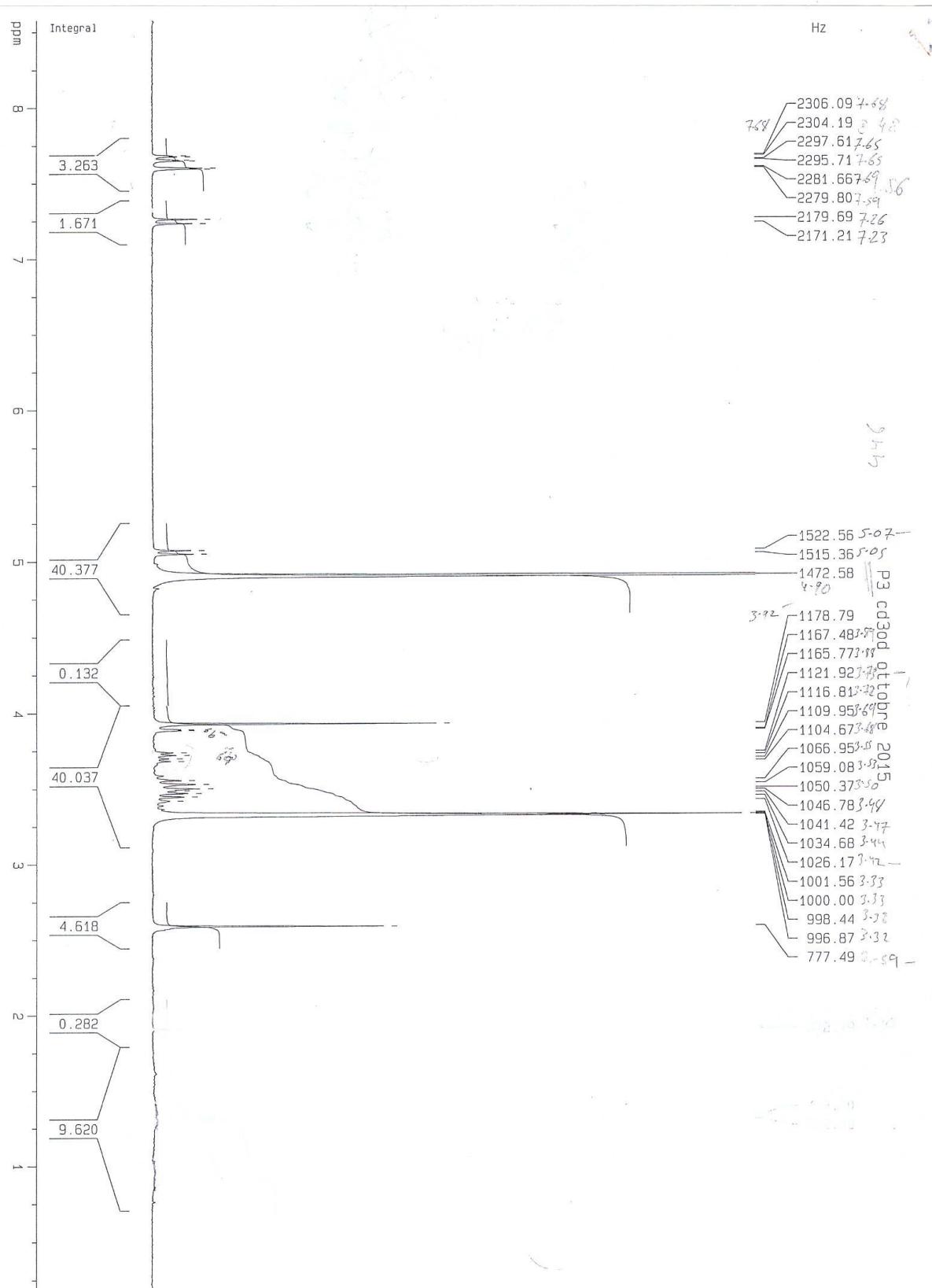


Figure S1. ¹H-NMR spectrum (300 MHz, CD₃OD) of androsin (**66**).

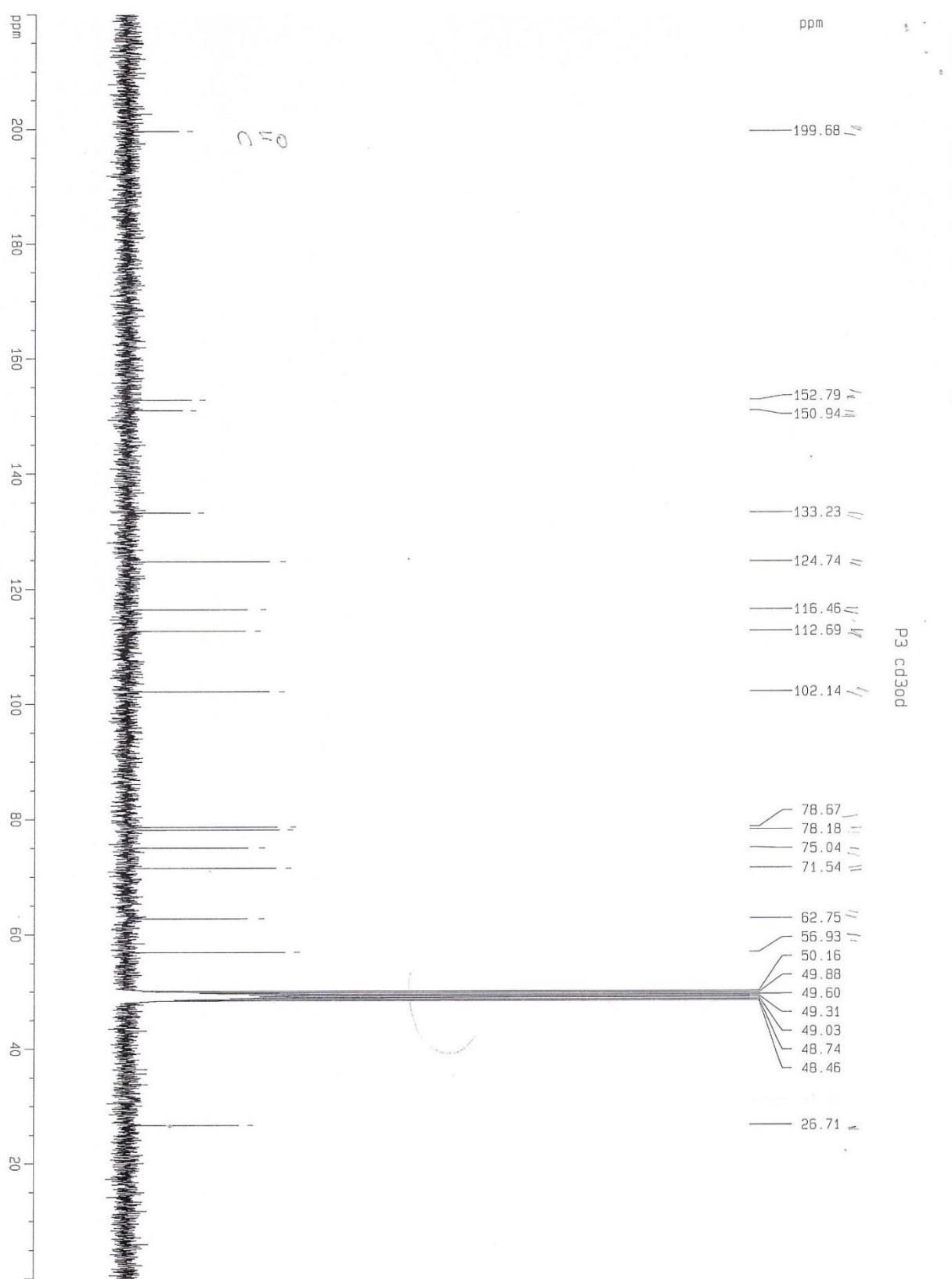


Figure S2. ^{13}C -NMR spectrum (75 MHz, CD_3OD) of androsin (**66**)

c:\xcaliburn\data\alaga\curdir\p3-mspos

//28/2015 12:10:03 HWI

p3-mspos



NL: 9.68E3
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ITMS + c ESI Full ms2
351.00@cid17.00
[95.00-600.00]

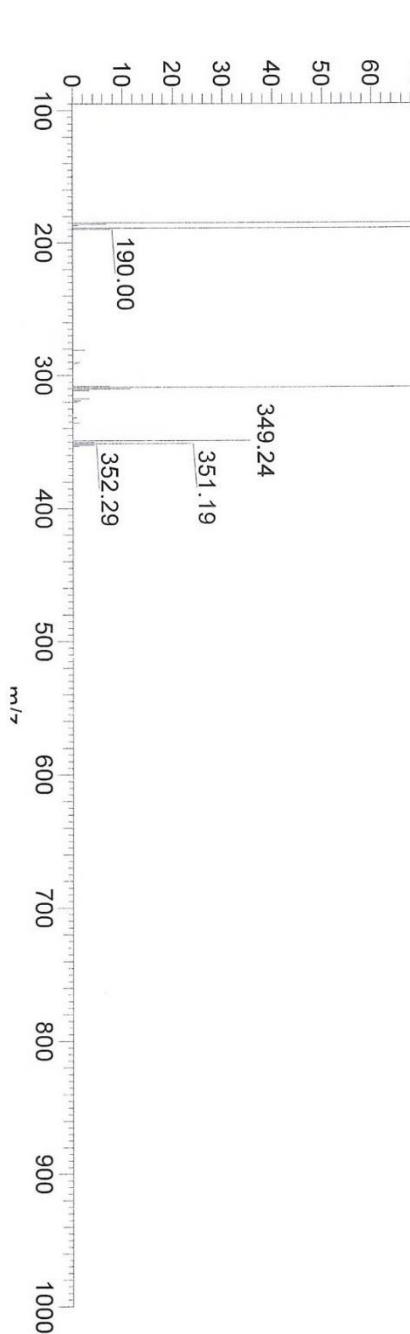


Figure S3. ESI-MS (positive ion mode) spectrum of androsin (66)

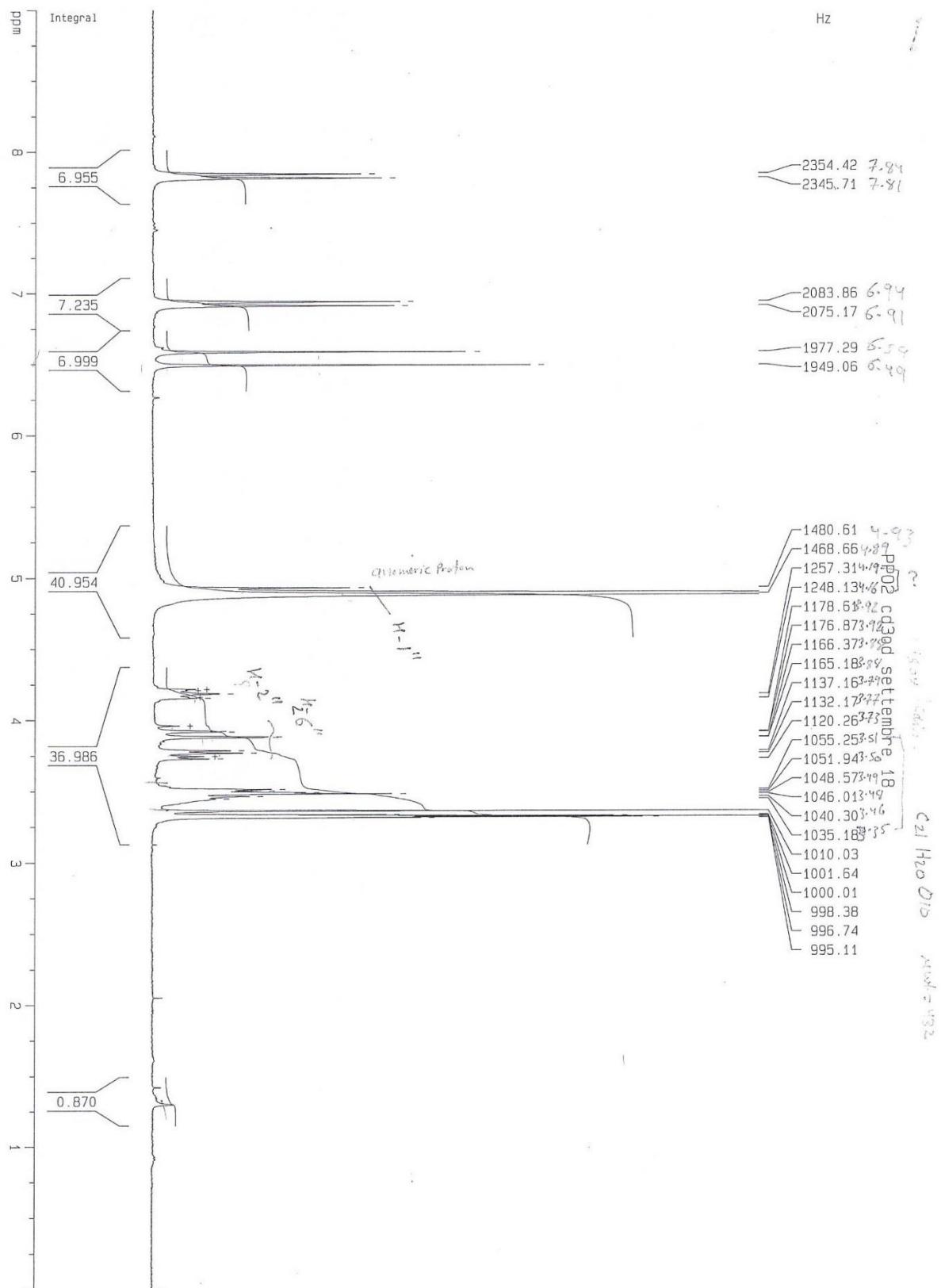


Figure S4. ^1H -NMR spectrum (300 MHz, CD_3OD) of isovitexin (**109**)

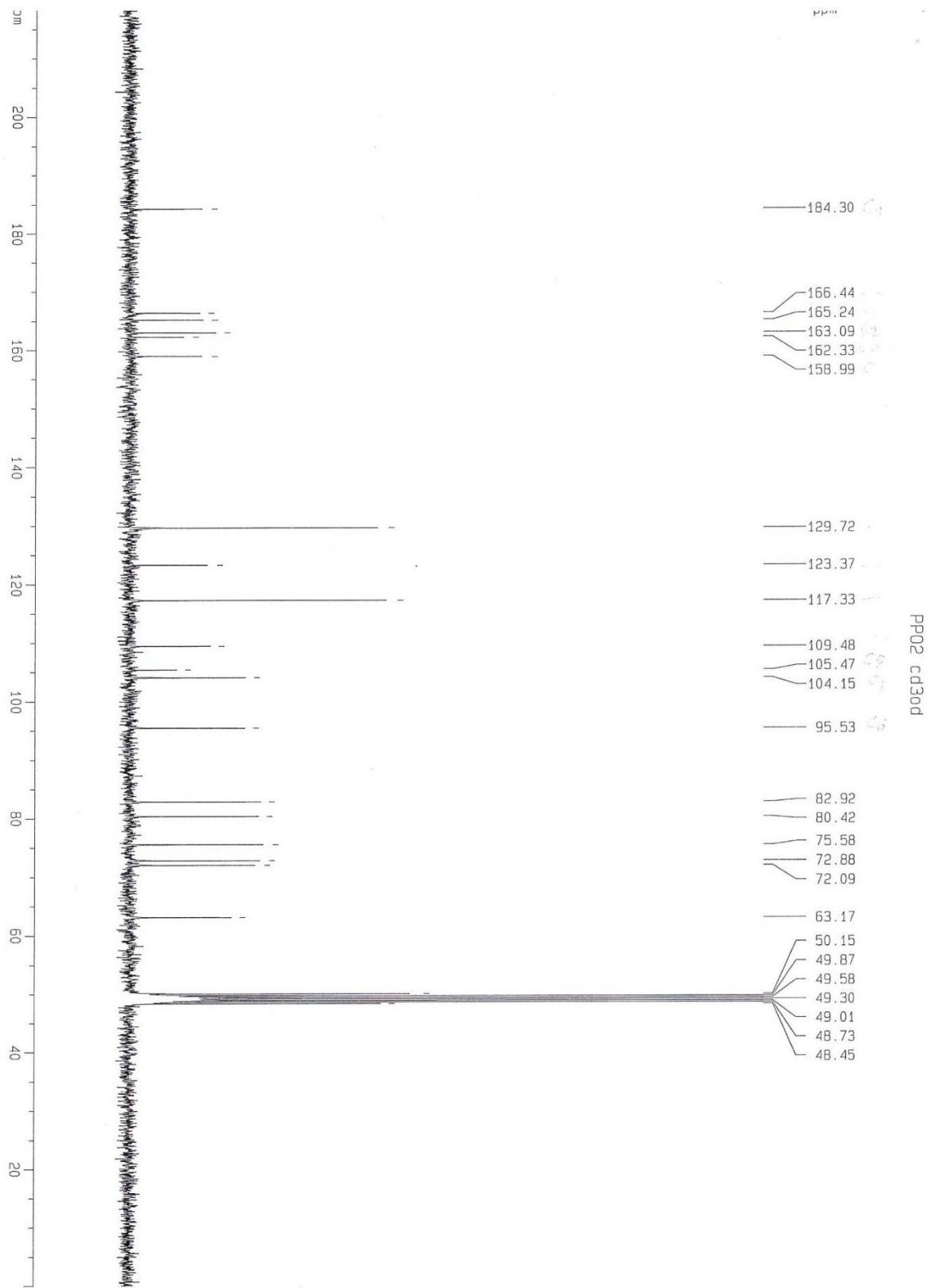


Figure S5. ^{13}C -NMR spectrum (75 MHz, CD_3OD) of isovitexin (**109**)

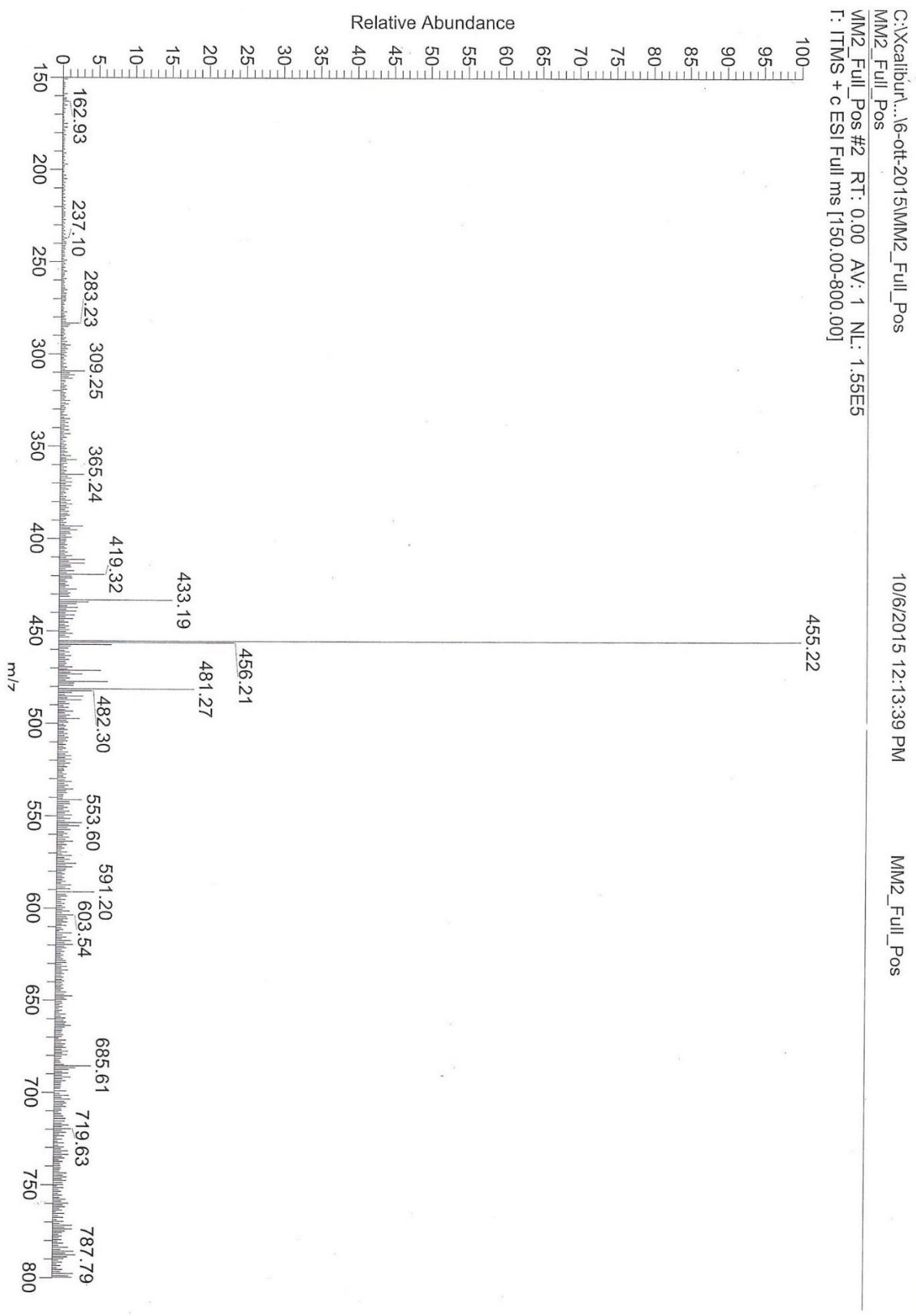


Figure S6. ESI-MS (positive ion mode) spectrum of isovitexin (109)

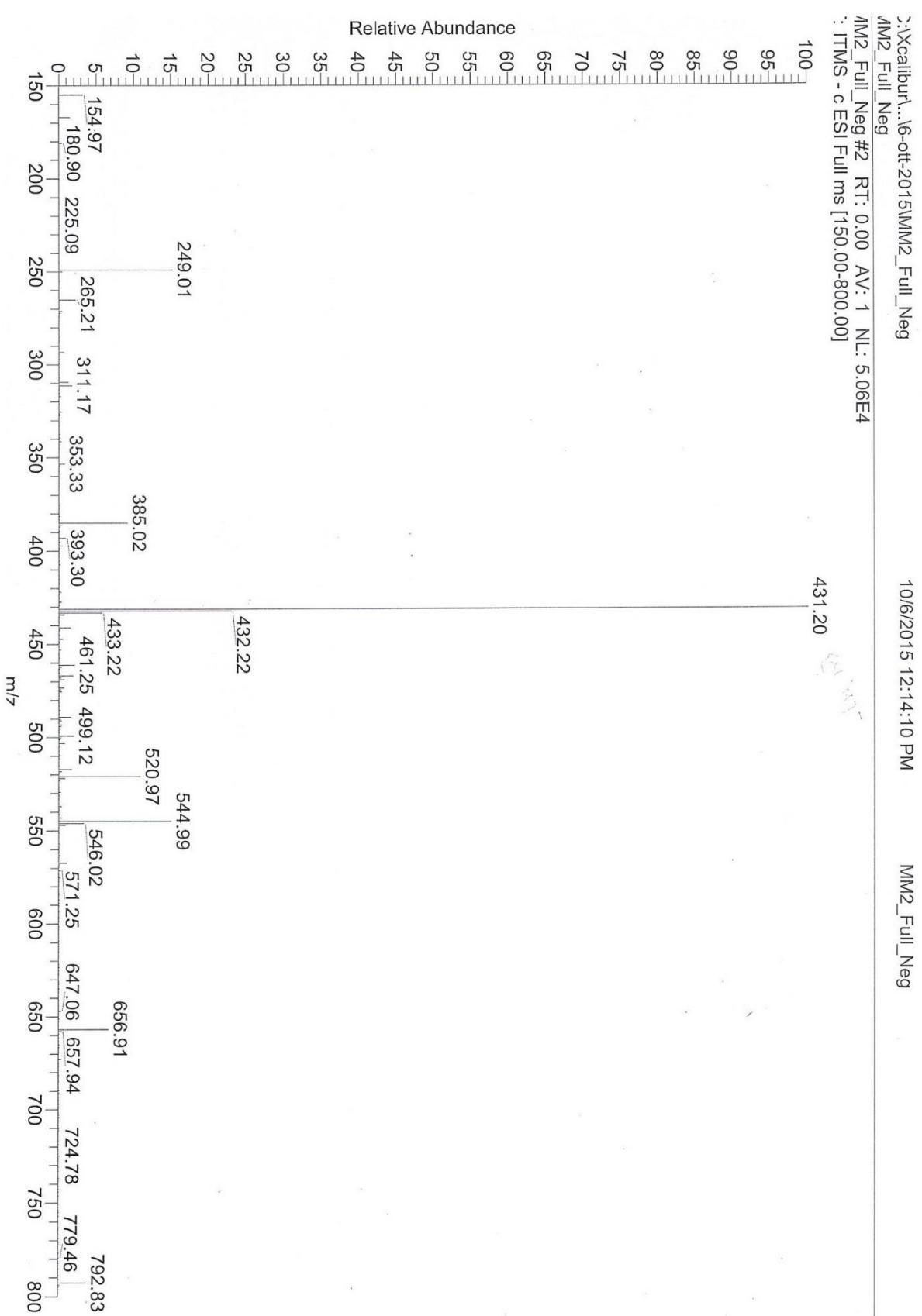


Figure S7. ESI-MS (negative ion mode) spectrum of isovitexin (109)

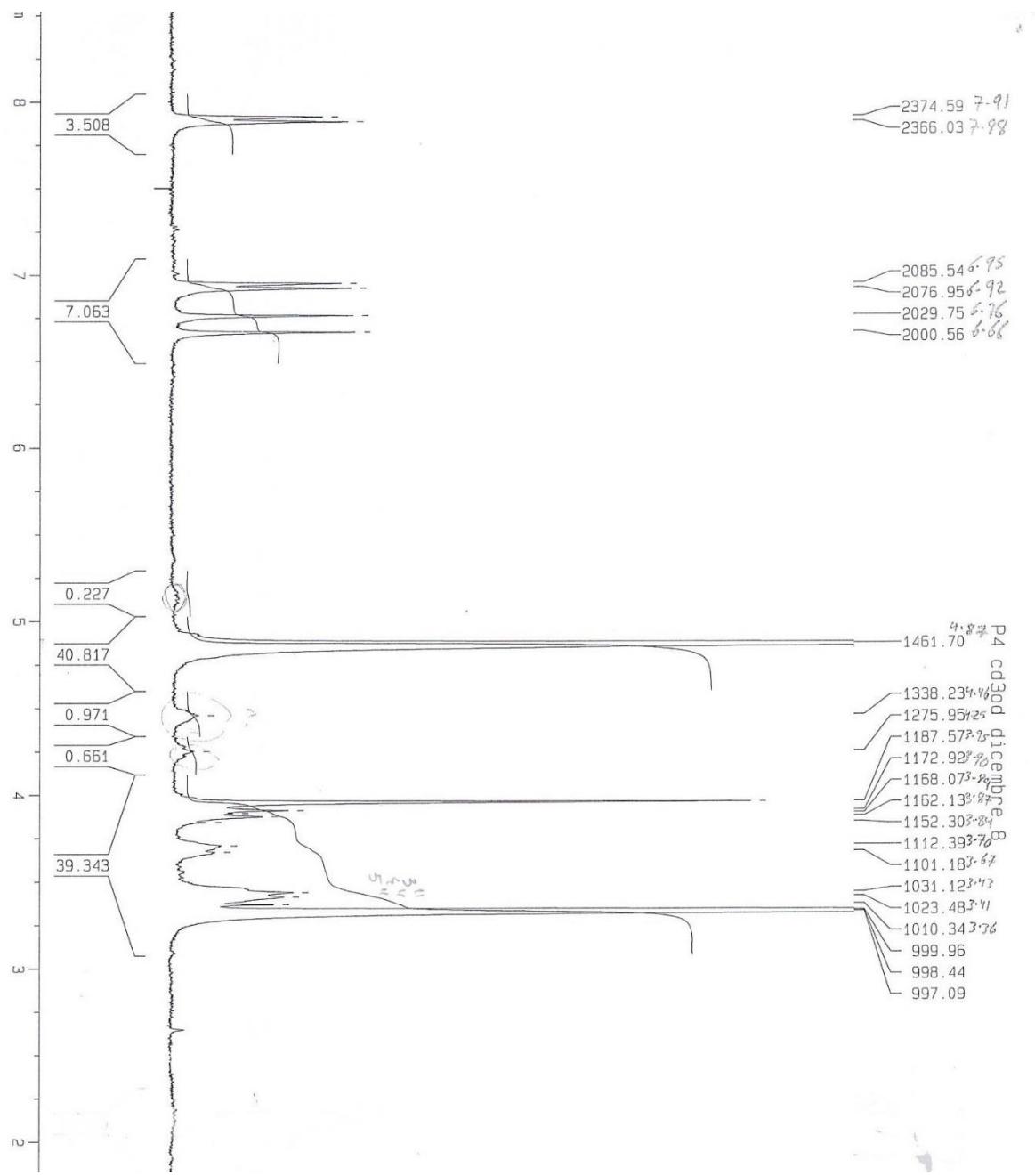


Figure S8. ^1H -NMR spectrum (300 MHz, CD_3OD) of swertisin (**111**)

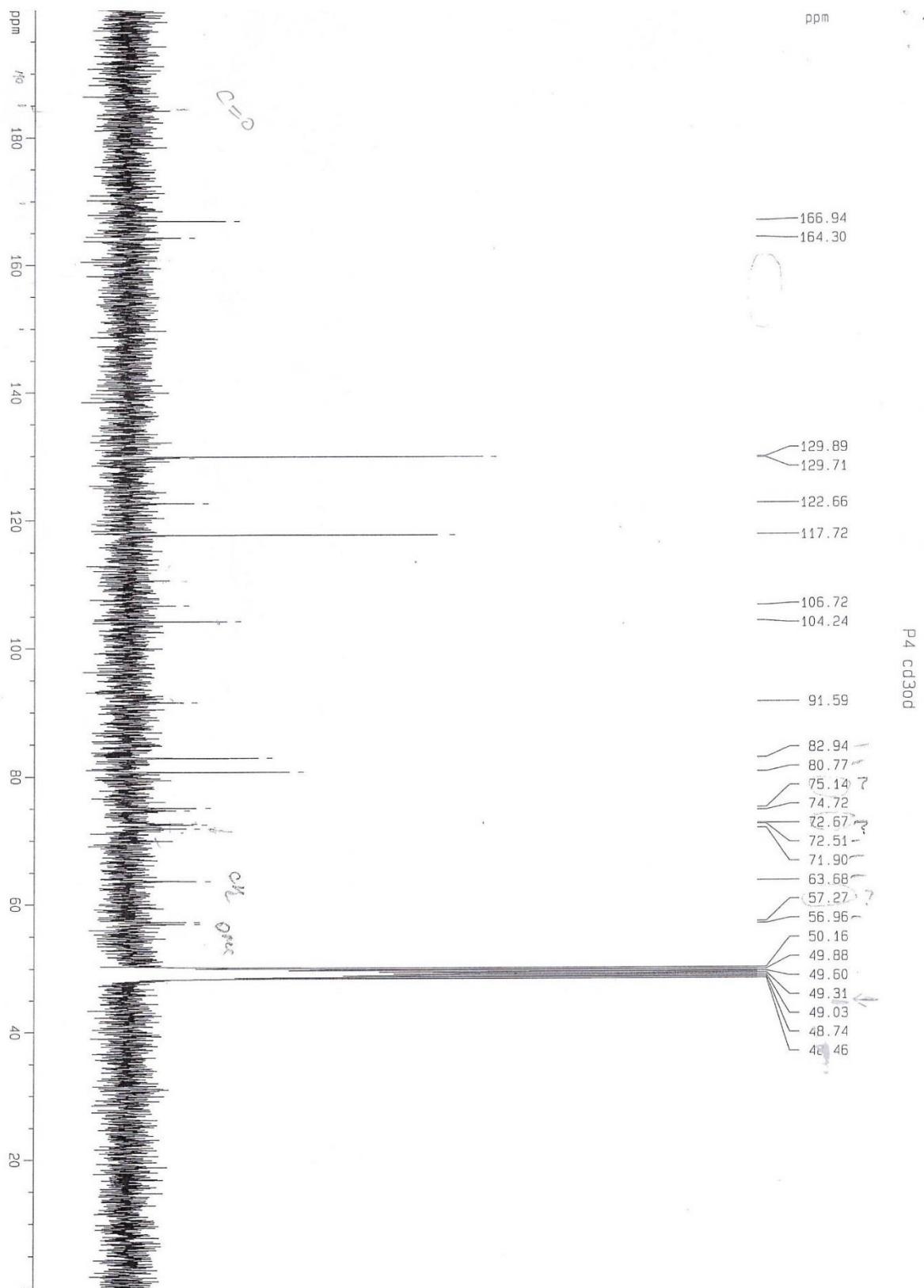


Figure S9. ¹³C-NMR spectrum (75 MHz, CD₃OD) of swertisin (111)

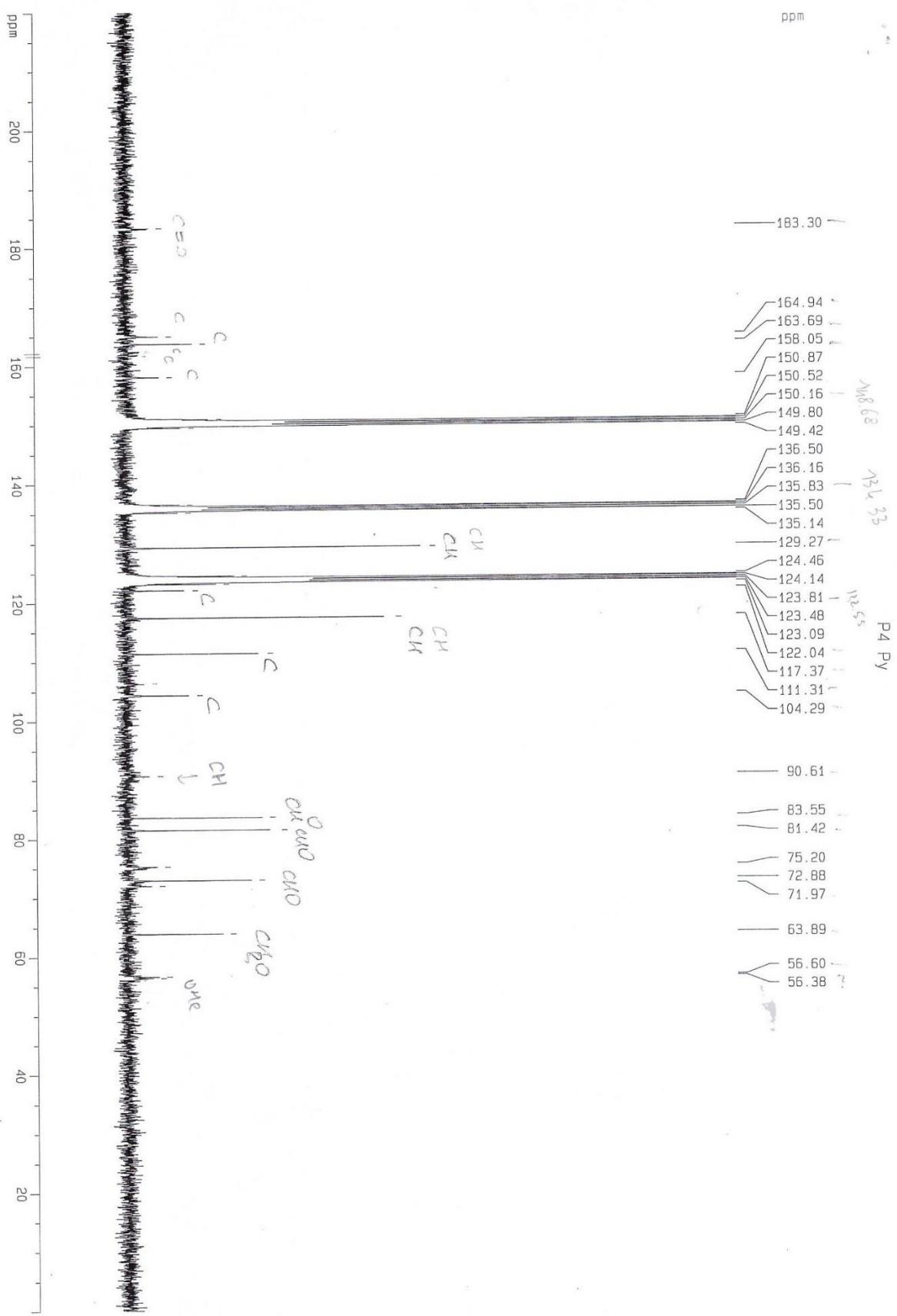


Figure S10. ^{13}C -NMR spectrum (75 MHz, $\text{C}_5\text{D}_5\text{N}$) of swertisin (**111**)

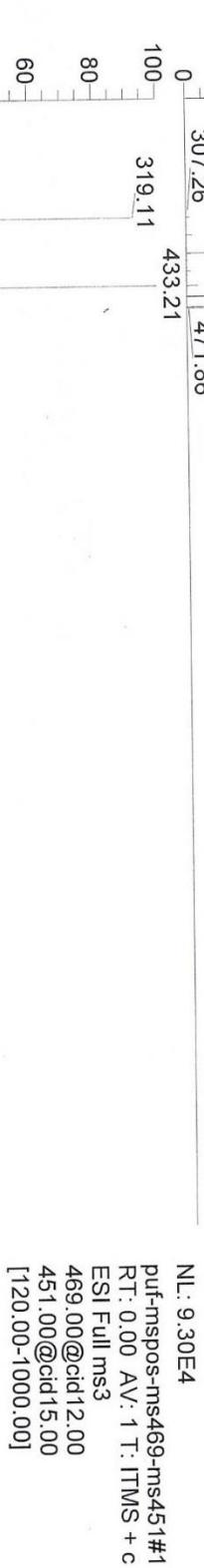
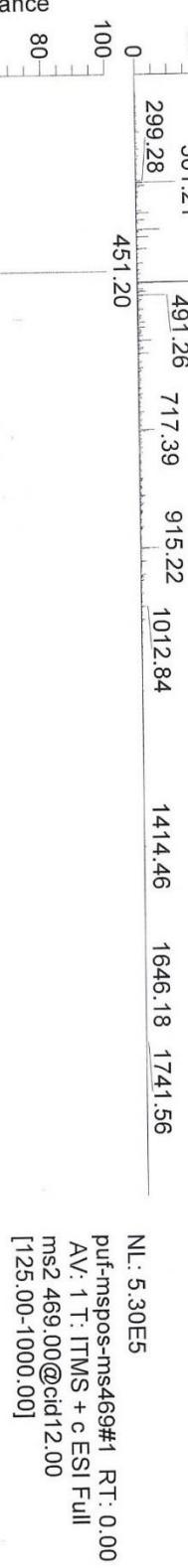


Figure S11. ESI-MS (positive ion mode) spectrum of swertisin (111)

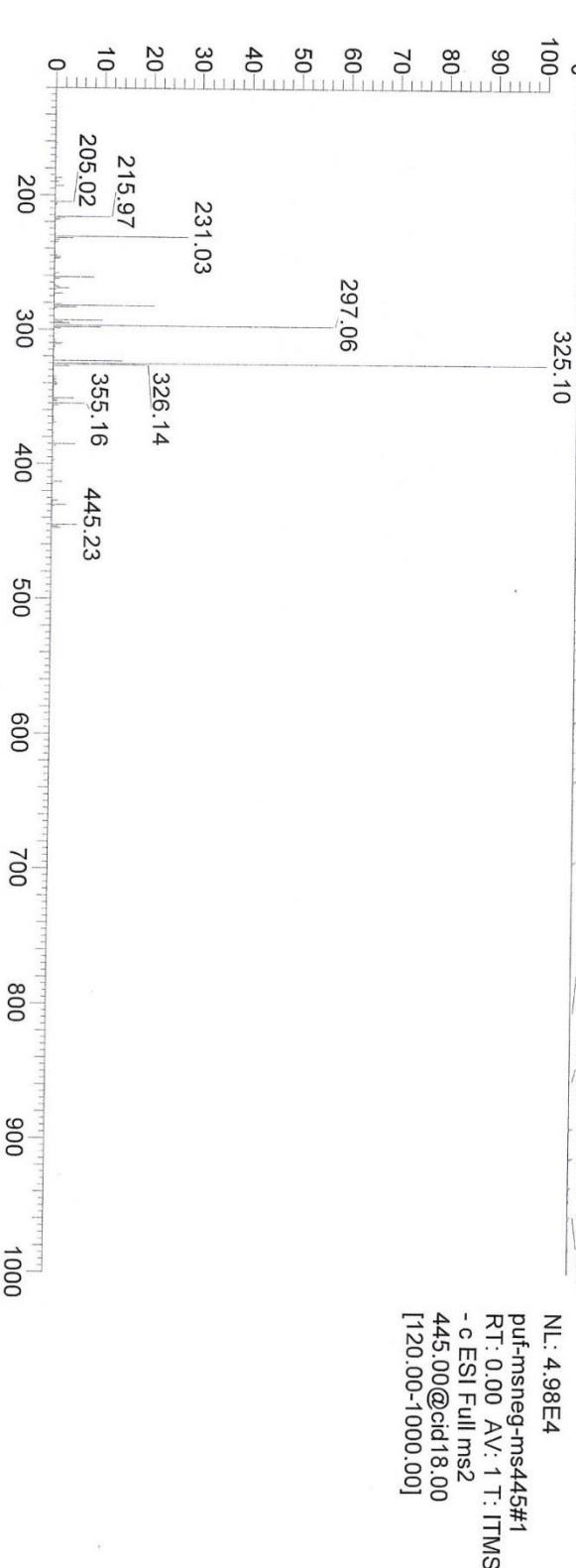
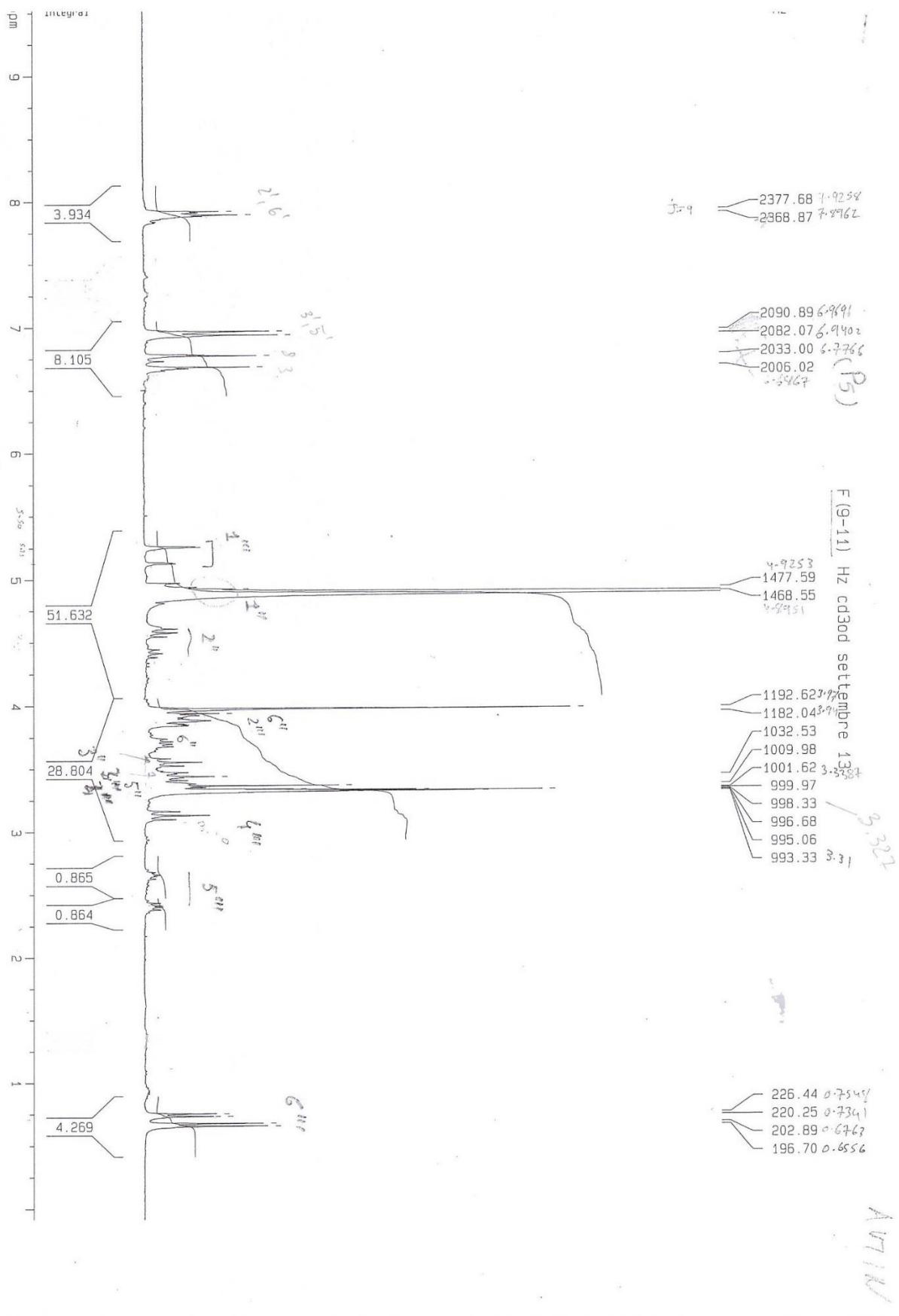


Figure S12. ESI-MS (negative ion mode) spectrum of swertisin (111)



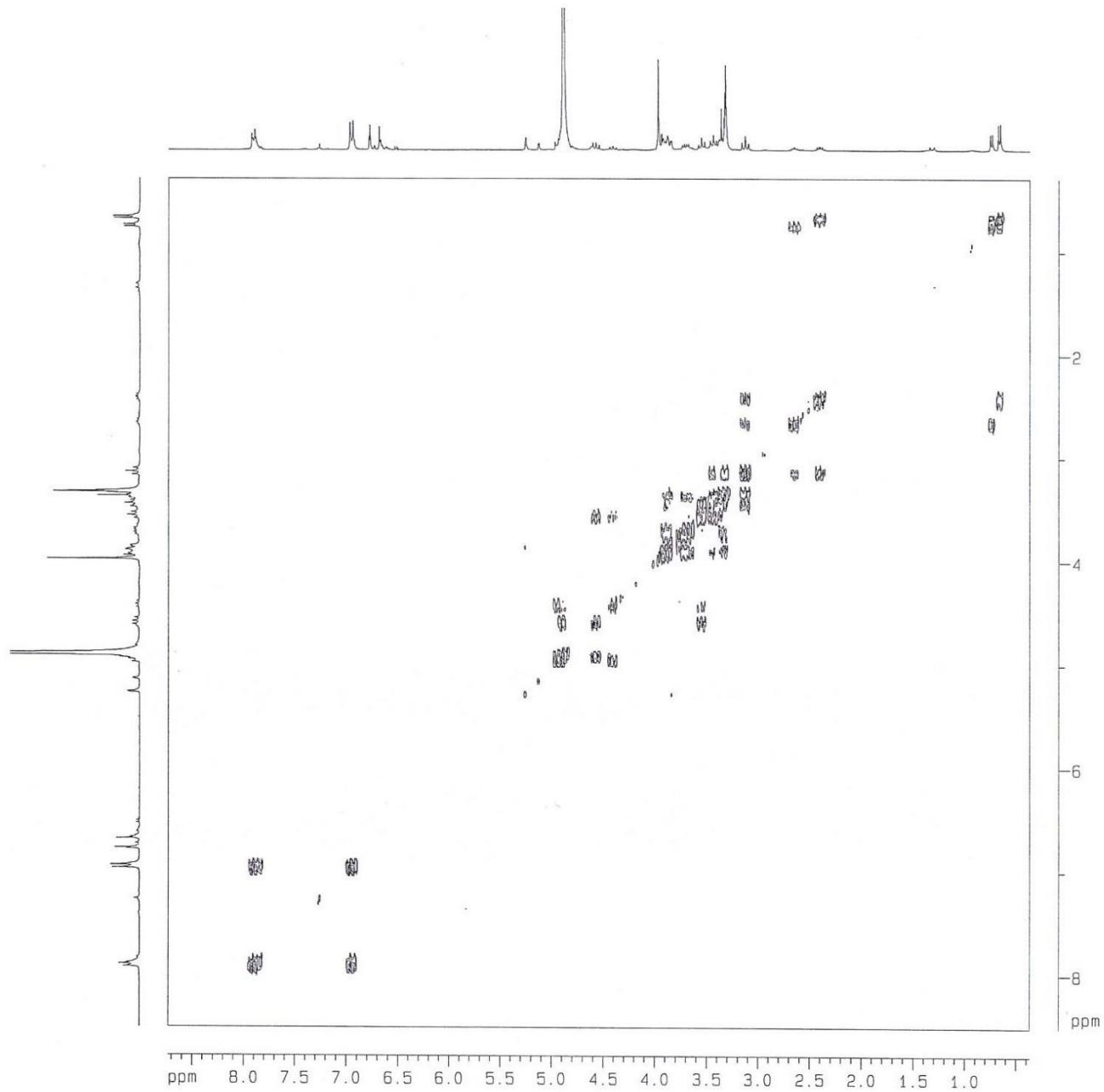


Figure S14. COSY spectrum of 2''-O- α -L-rhamnosyl swertisin (112)

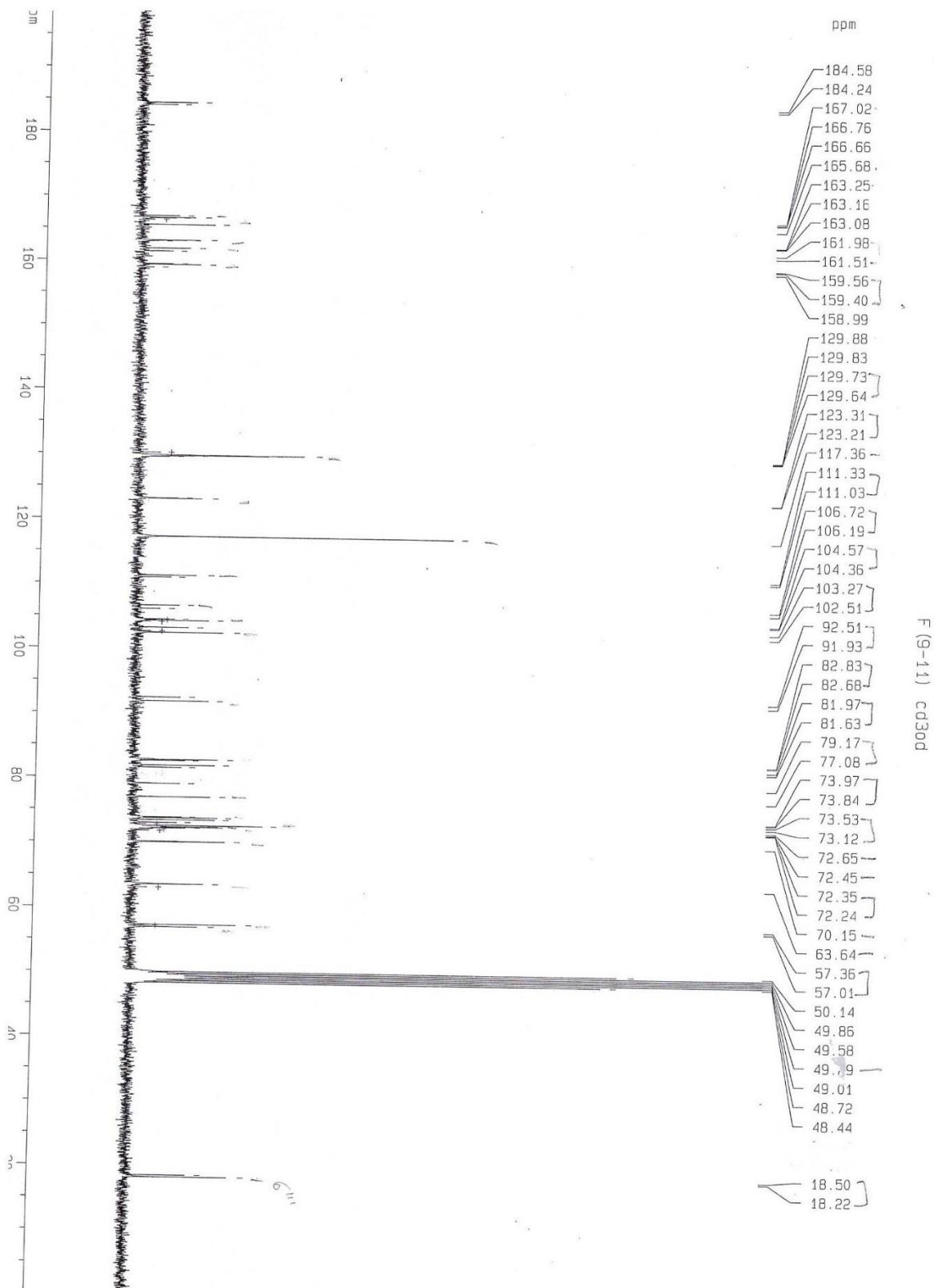


Figure S15. ¹³C-NMR spectrum (75 MHz, CD₃OD) of 2''-O- α -L-rhamnosyl swertisin (**112**)

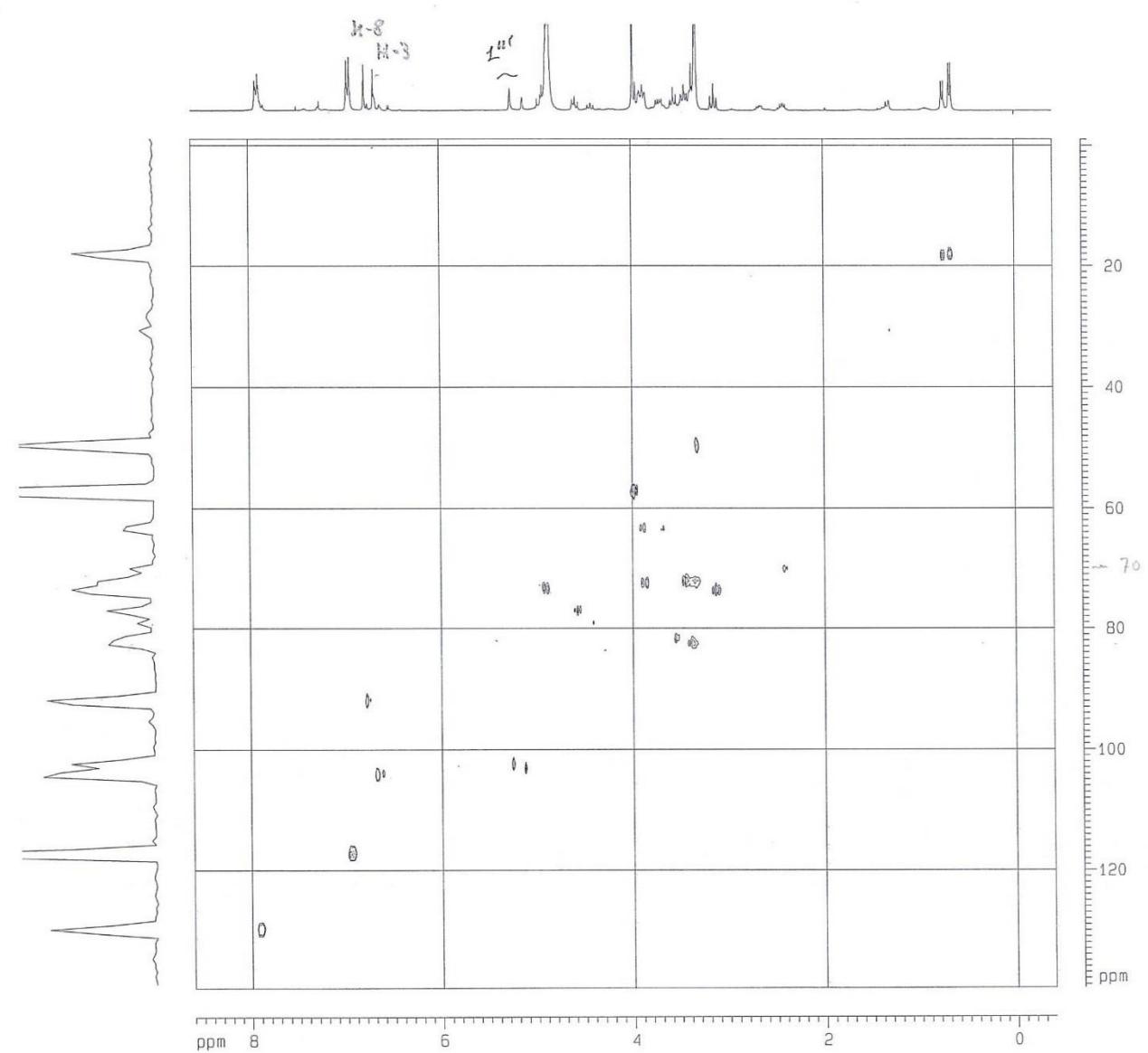


Figure S16. HSQC spectrum of 2"-O- α -L-rhamnosyl swertisin (112)

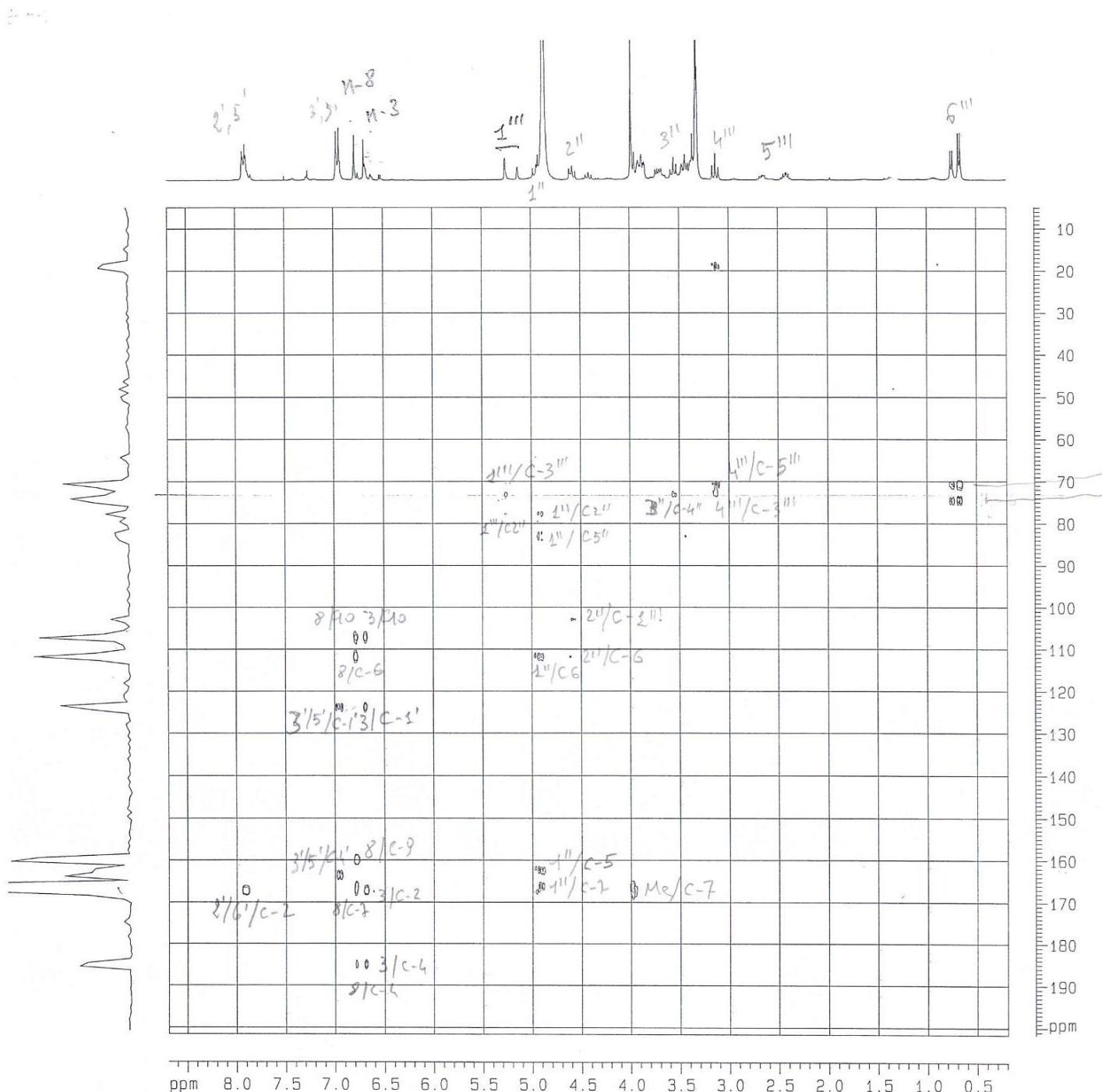


Figure S17. HMBC spectrum of 2''-O- α -L-rhamnosyl swertisin (112)

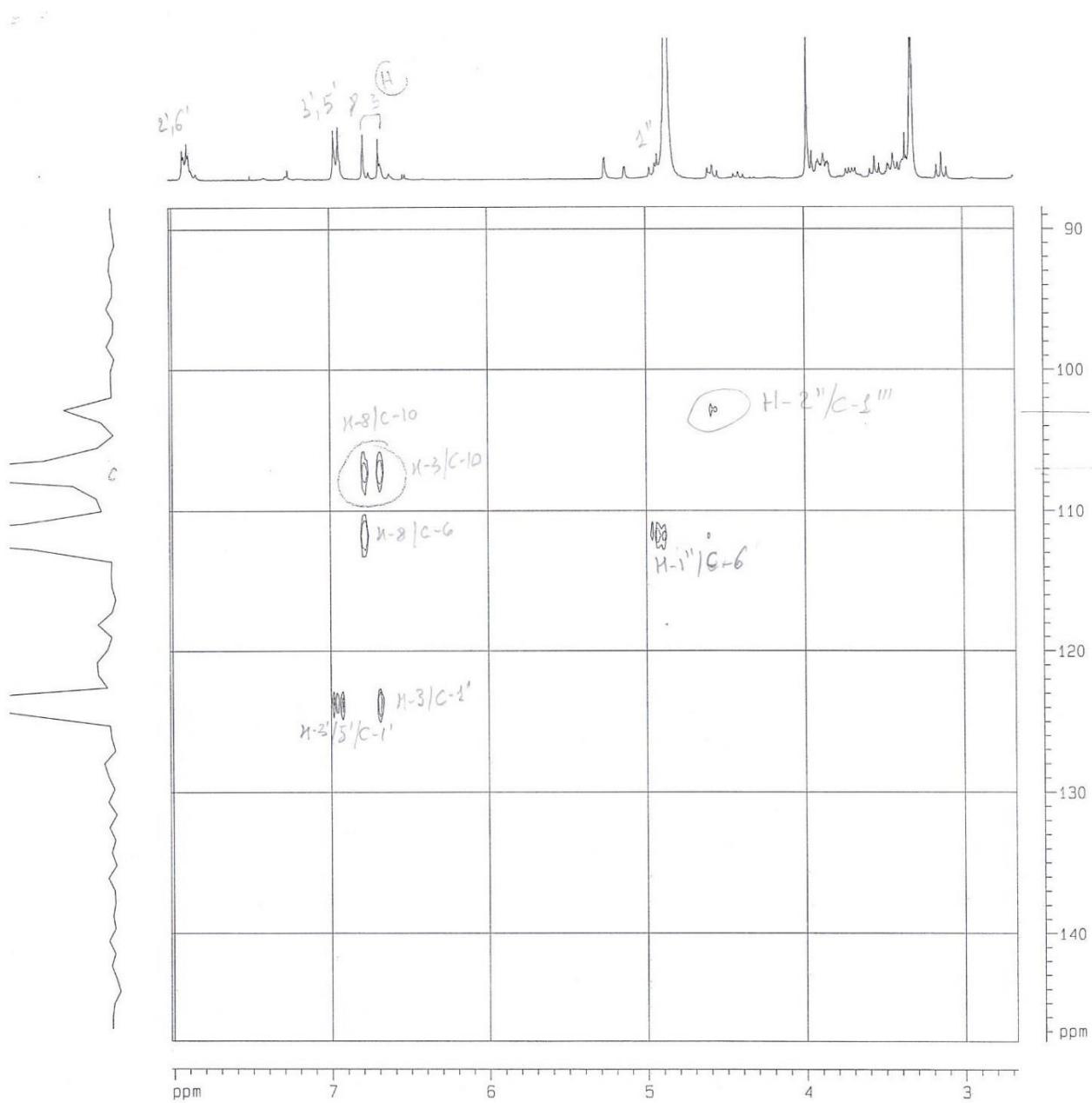


Figure S18. HMBC spectrum (enlargement 1) of 2''-O- α -L-rhamnosyl swertisin (**112**)

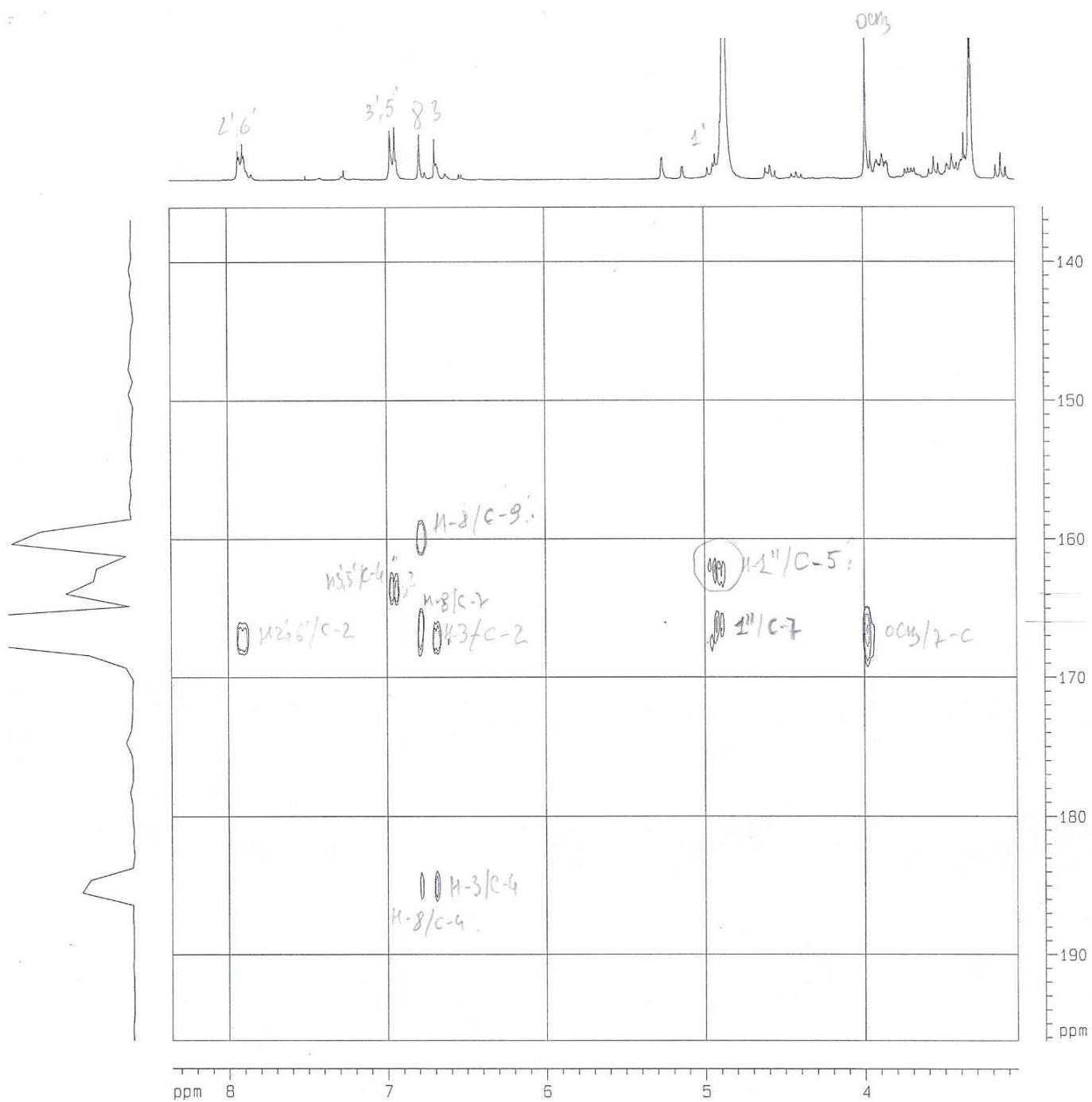


Figure S19. HMBC spectrum (enlargement 2) of 2''-O- α -L-rhamnosyl swertisin (112)

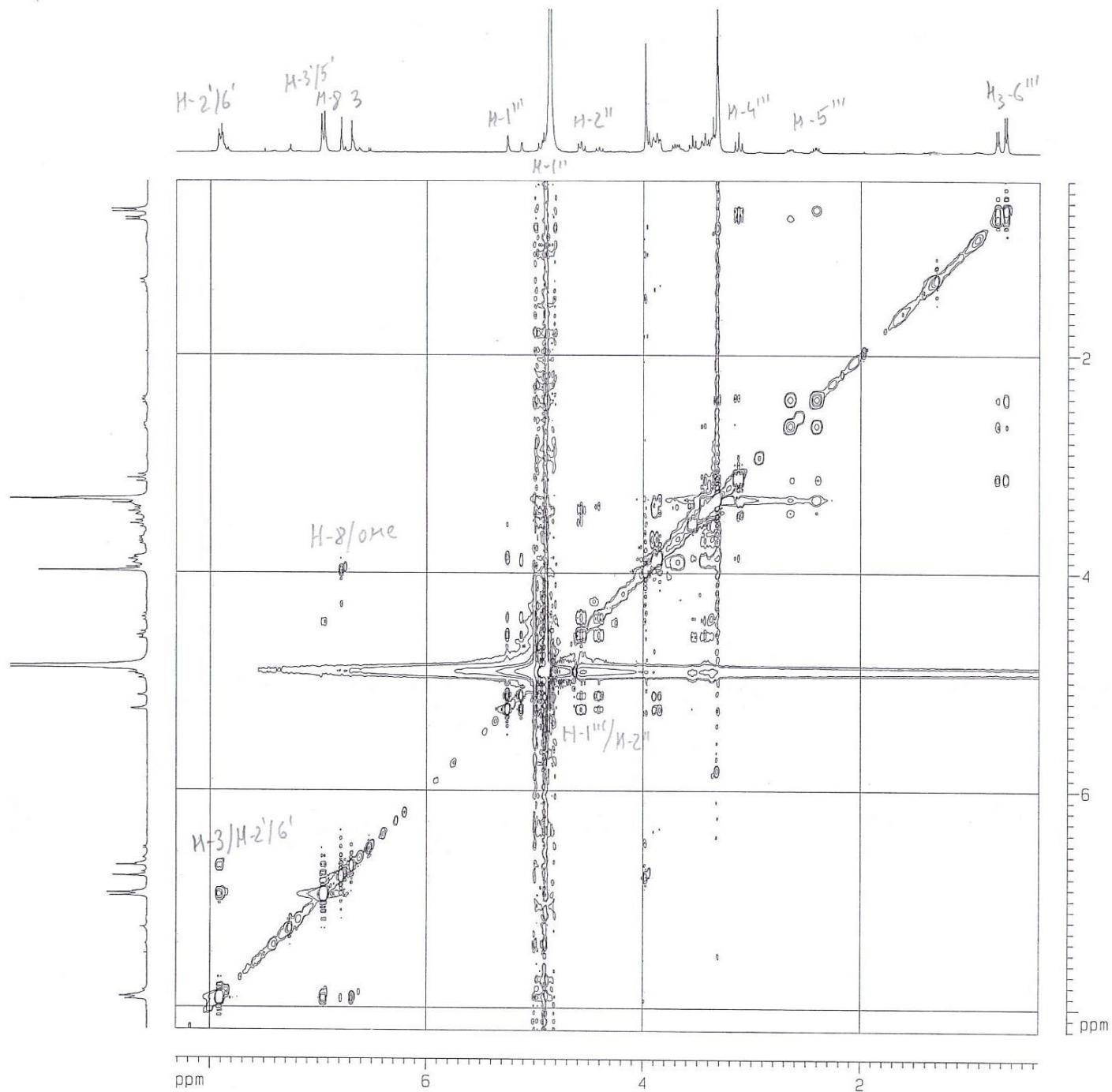


Figure S20. NOESY spectrum of 2"-O- α -L-rhamnosyl swertisin (112)

C:\Xcalibur\data\AMINIF_9-H_H2_-fullMS
F_9-H_H2

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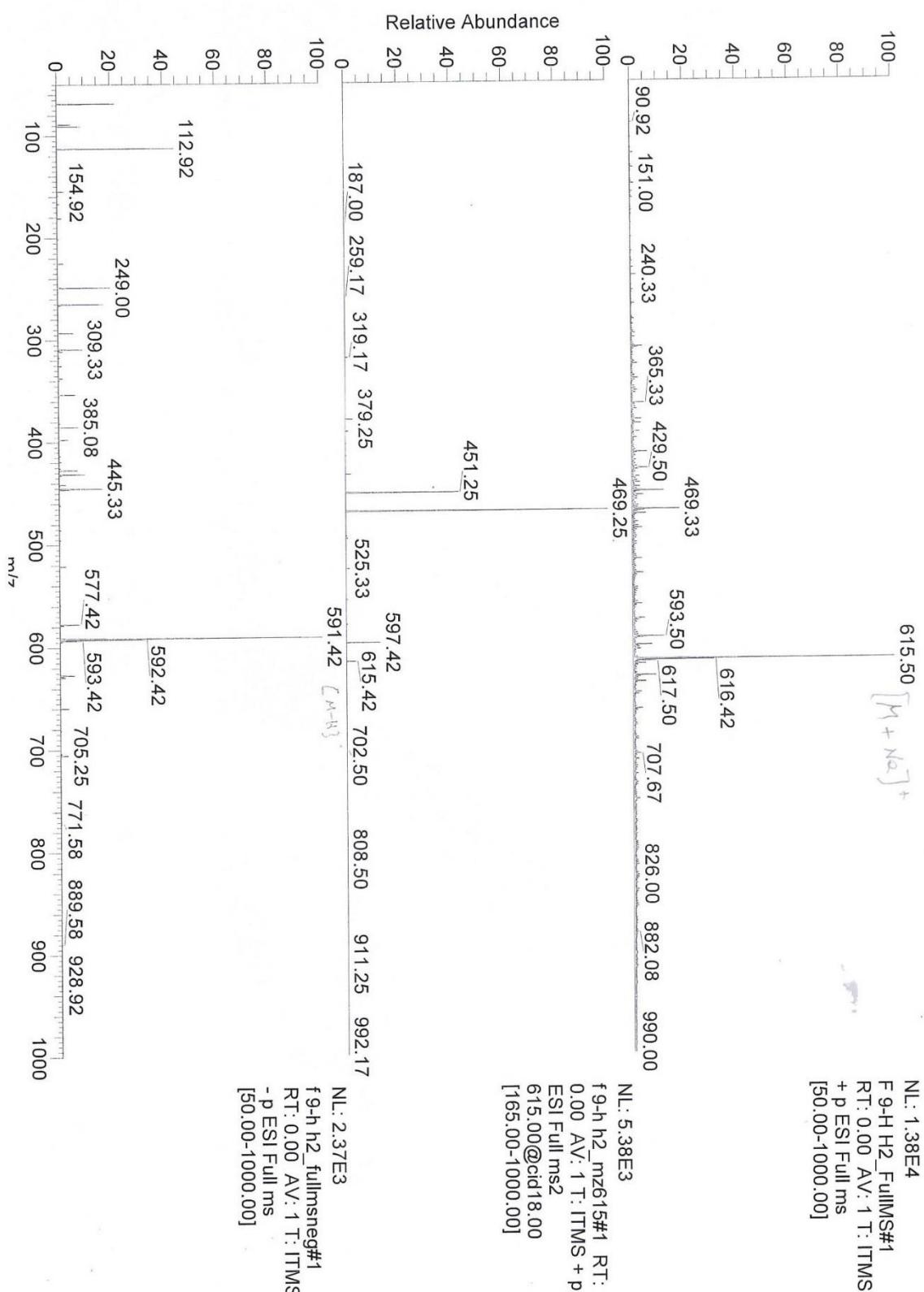


Figure S21. ESI-MS spectra (positive and negative ion mode) of 2''-O- α -L-rhamnosyl swertisin (112)

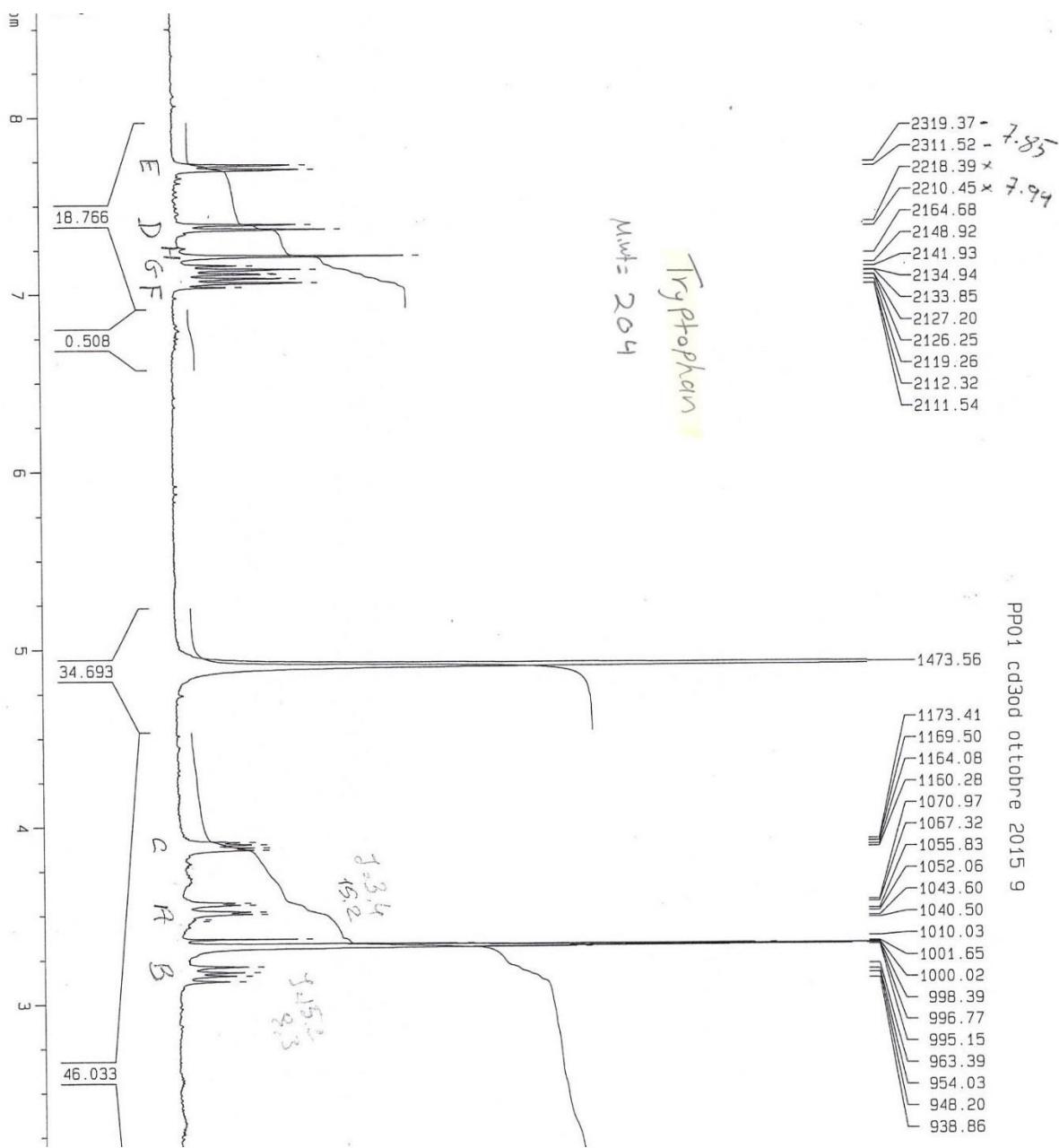


Figure S22. ^1H -NMR spectrum (300 MHz, CD_3OD) of tryptophan

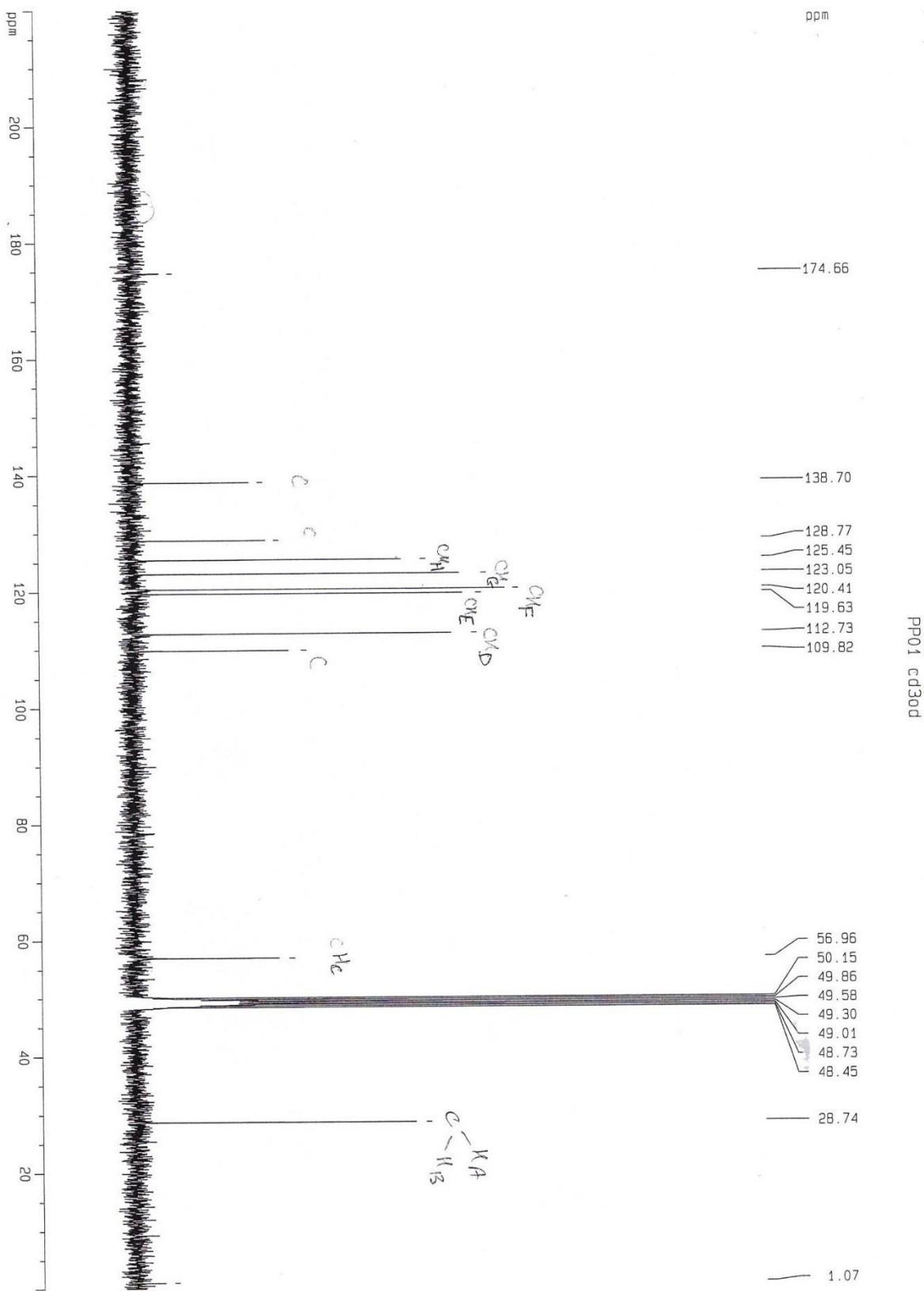


Figure S23. ^{13}C -NMR spectrum (75 MHz, CD_3OD) of tryptophan

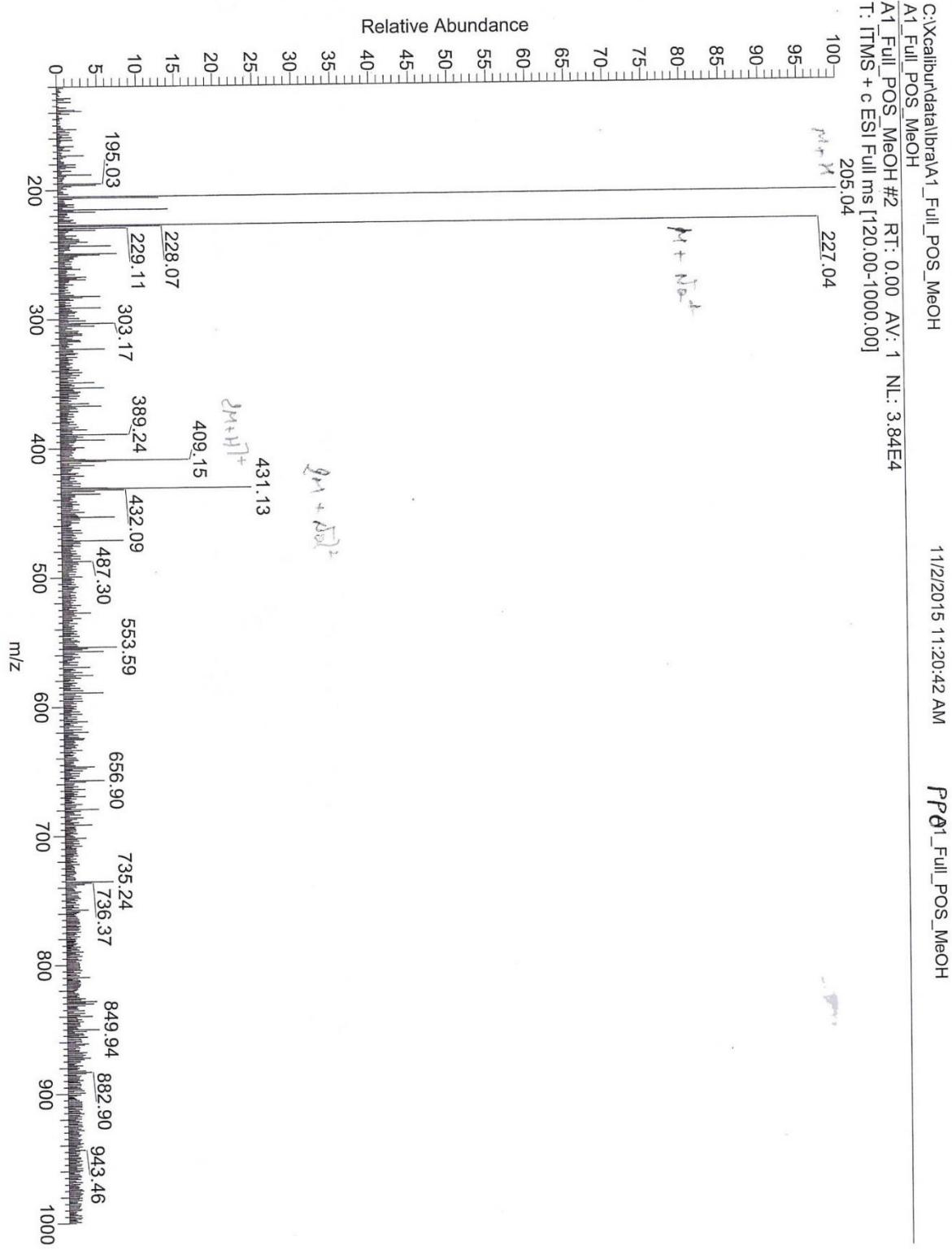


Figure S24. ESI-MS (positive ion mode) spectrum of tryptophan

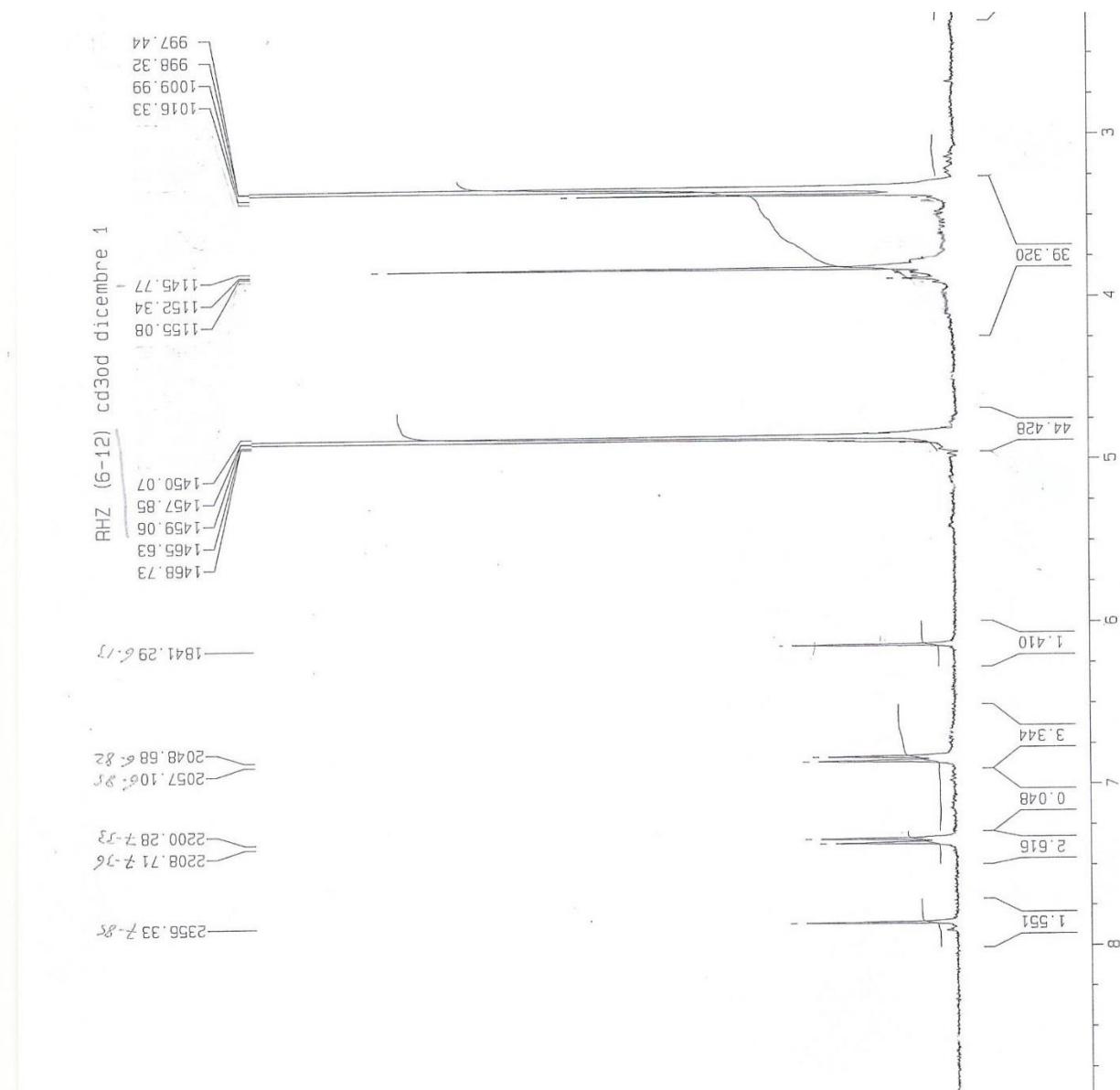


Figure S25. ^1H -NMR spectrum (300 MHz, CD_3OD) of isotectorigenin (115)

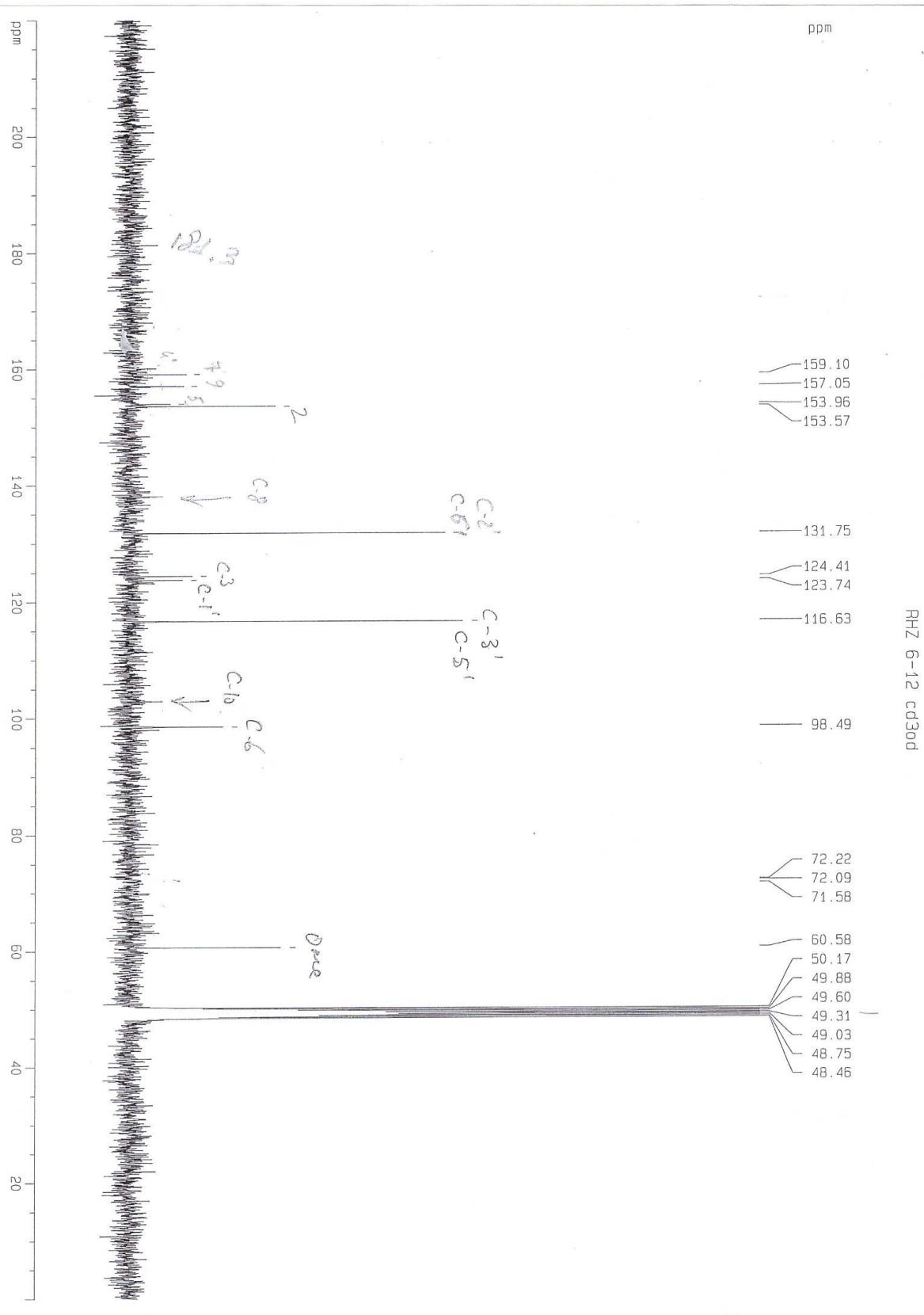


Figure S26. ^{13}C -NMR spectrum (75 MHz, CD_3OD) of isotectorigenin (115)

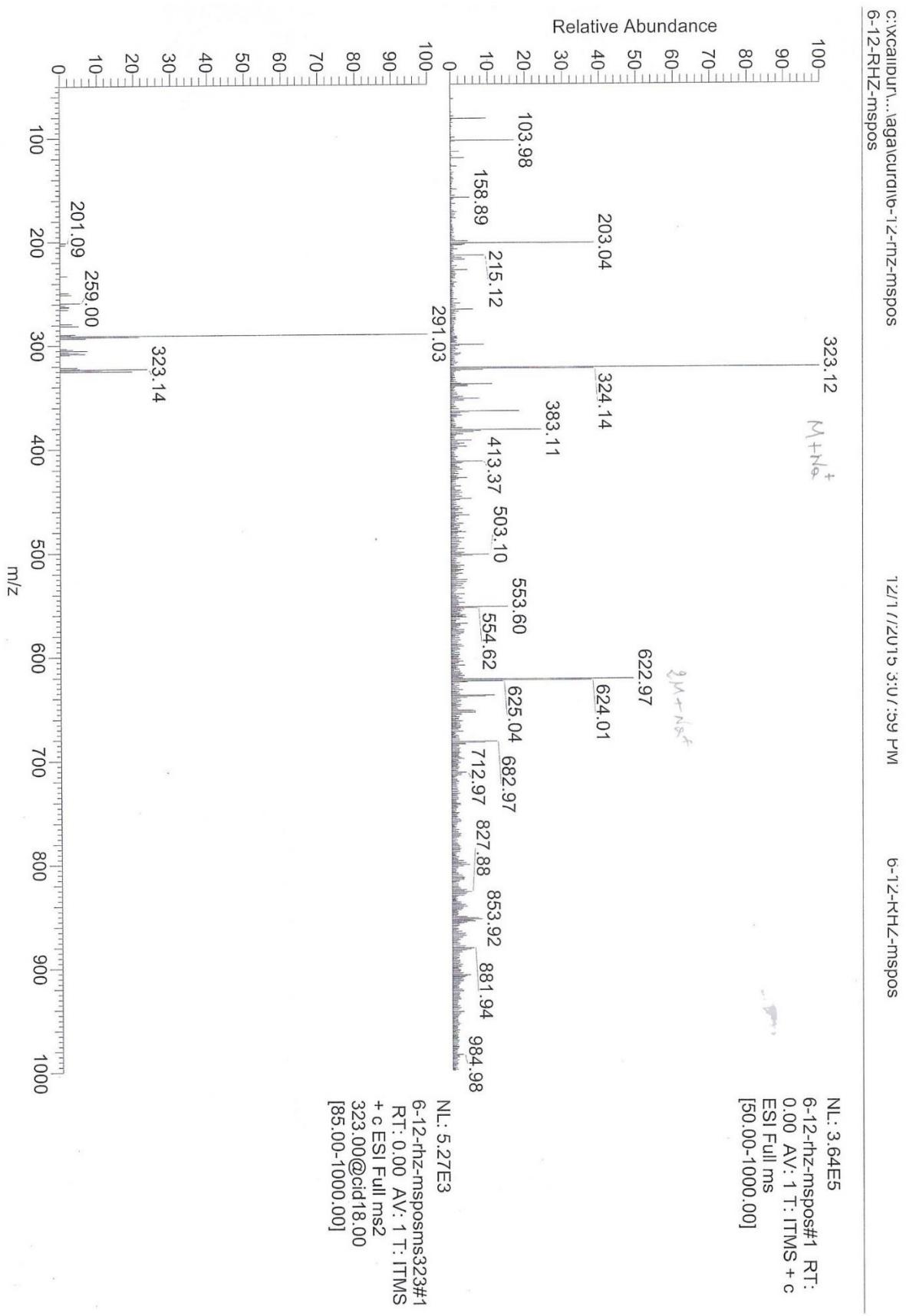


Figure S27. ESI-MS (positive ion mode) spectrum of isotectorigenin (115)



NL: 1.52E5
6-12-rhz-msneg-
ms300#1 RT: 0.00 AV:
1 T; ITMS - C ESI Full
ms2 300.00@cid19.00
[80.00-1000.00]

Figure S28. ESI-MS (negative ion mode) spectrum of isotectorigenin (115)

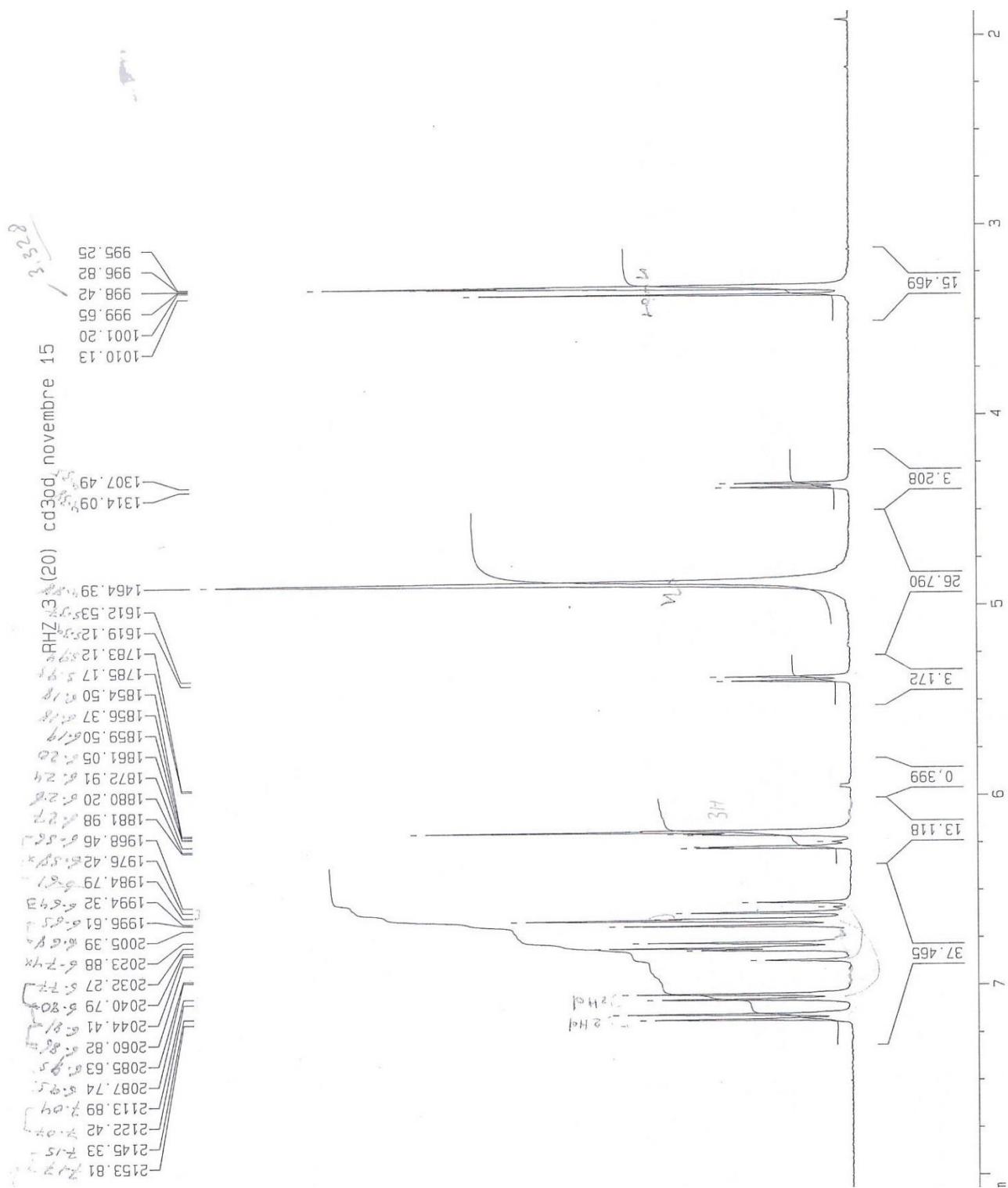


Figure S29. ^1H -NMR spectrum (300 MHz, CD_3OD) of *trans*- ϵ -viniferin (**113**)

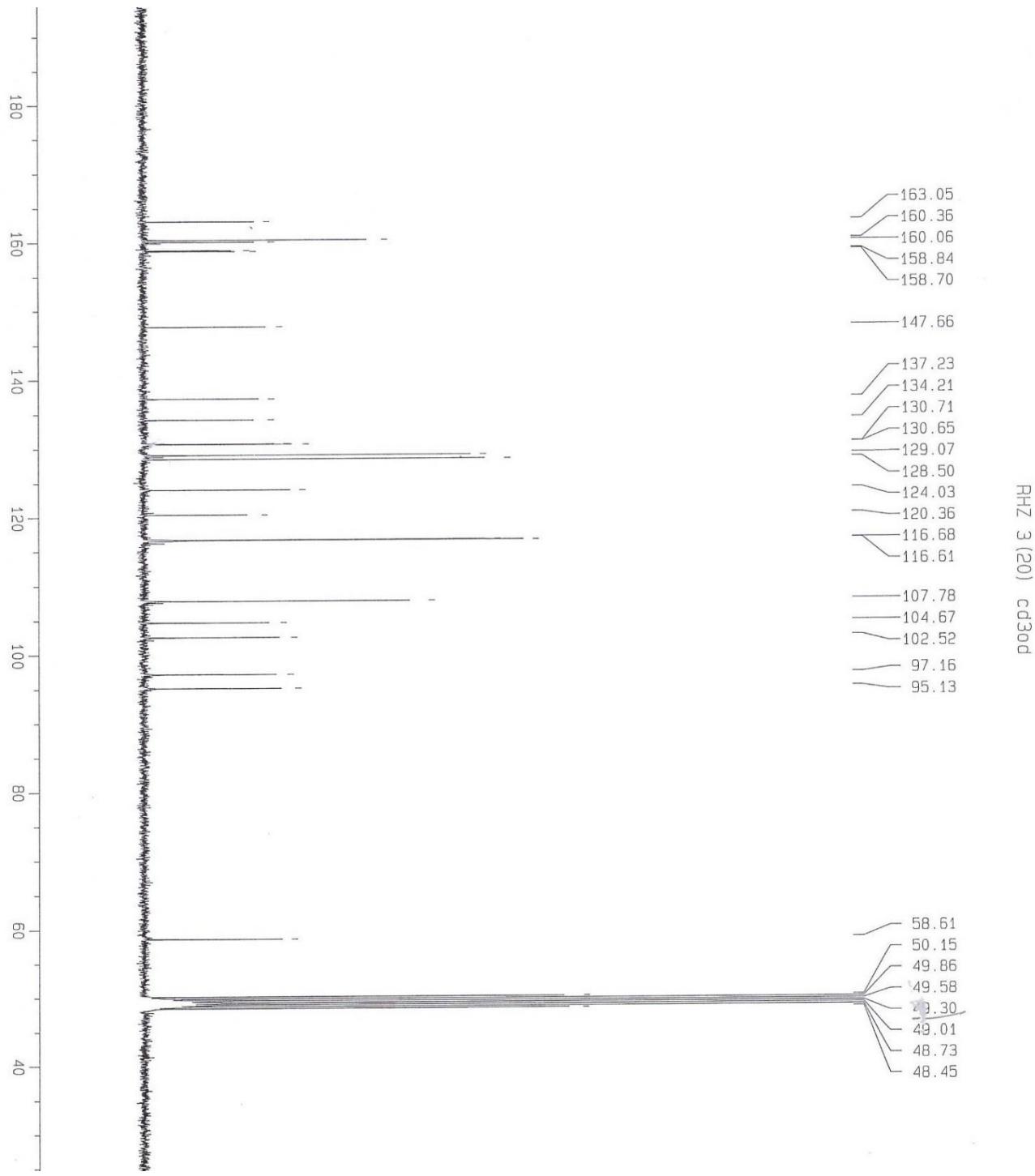


Figure S30. ¹³C-NMR spectrum (75 MHz, CD₃OD) of *trans*- ϵ -viniferin (**113**)

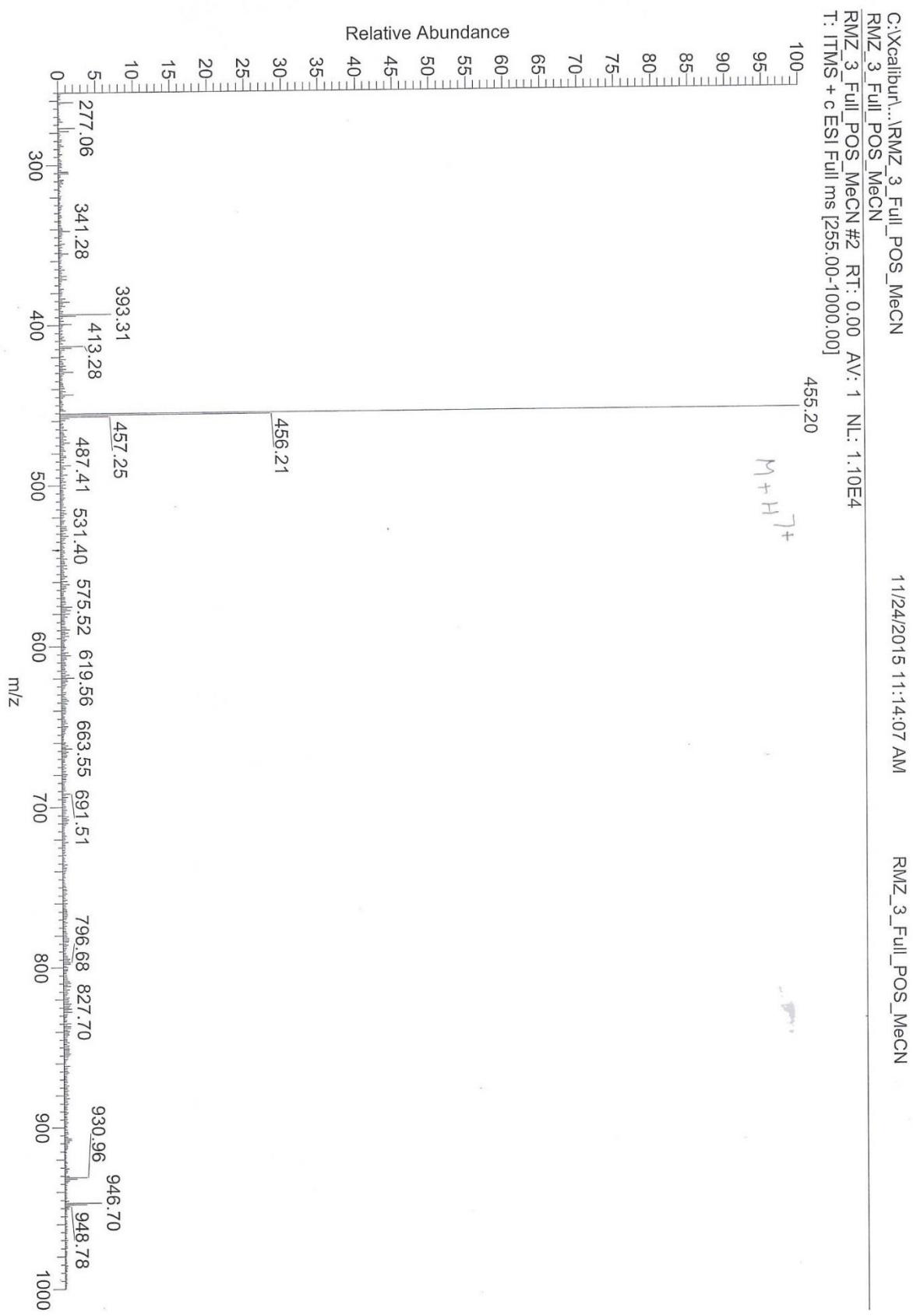


Figure S31. ESI-MS (positive ion mode) spectrum of *trans*- ϵ -viniferin (**113**)

:MZ_3_Full_NEG_MeOH #2 RT: 0.00 AV: 1 NL: 5.13E5
: ITMS - c ESI Full ms [150.00-1000.00]

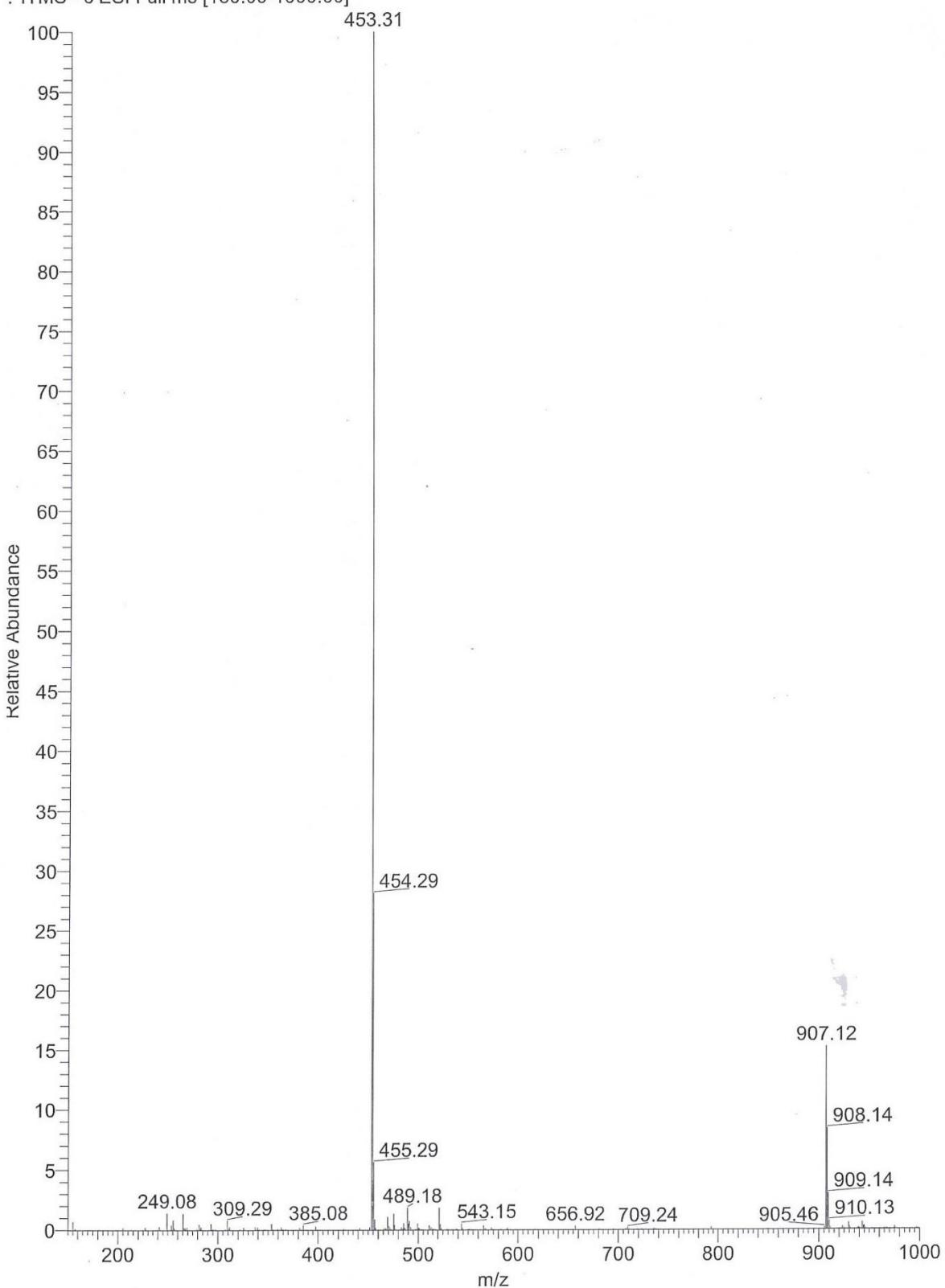


Figure S32. ESI-MS (negative ion mode) spectrum of *trans*- ϵ -viniferin (**113**)

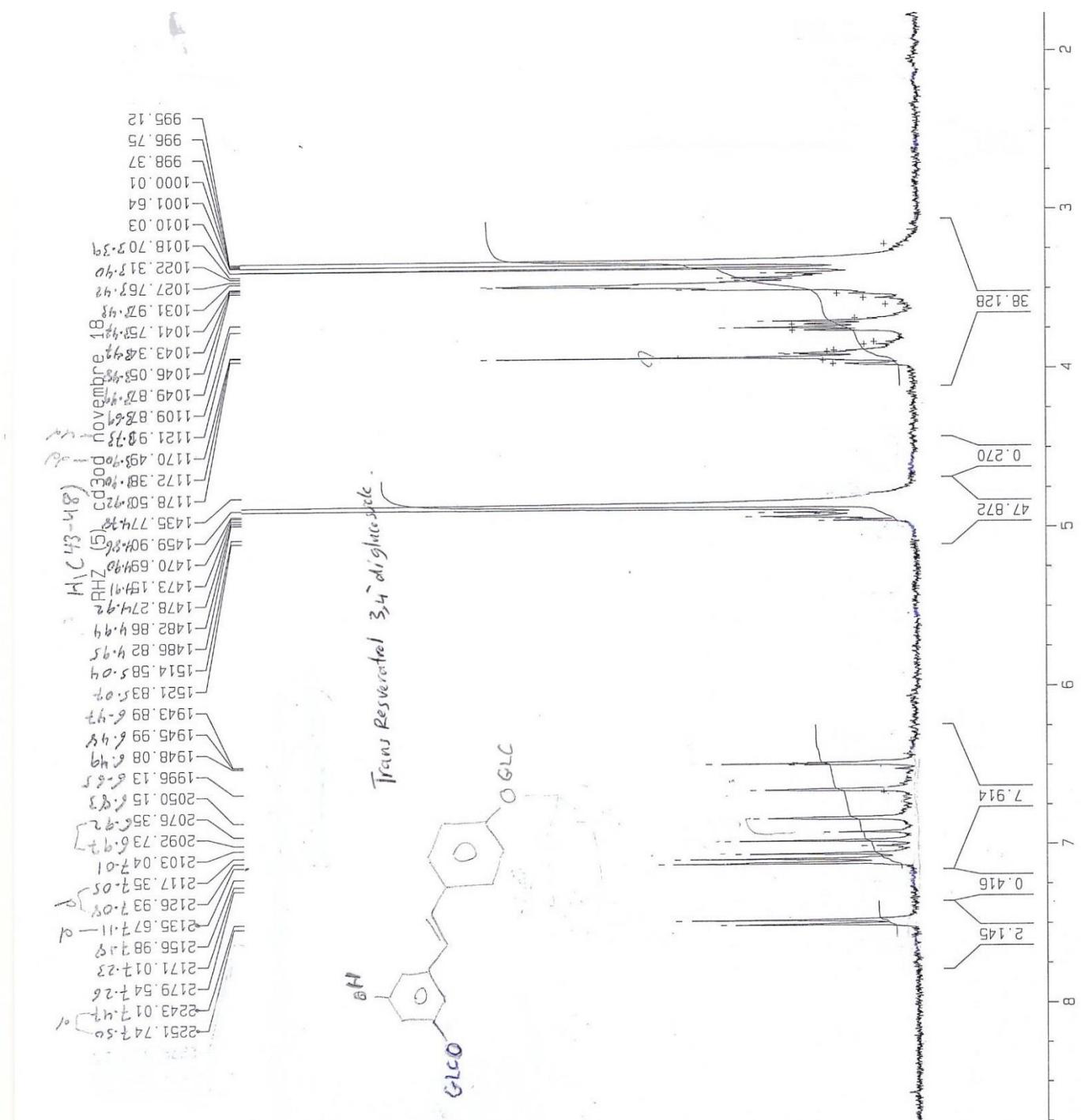


Figure S33. ^1H -NMR spectrum (300 MHz, CD_3OD) of resveratrol 3,4'-O-di- β -D-glucopyranoside (**114**)

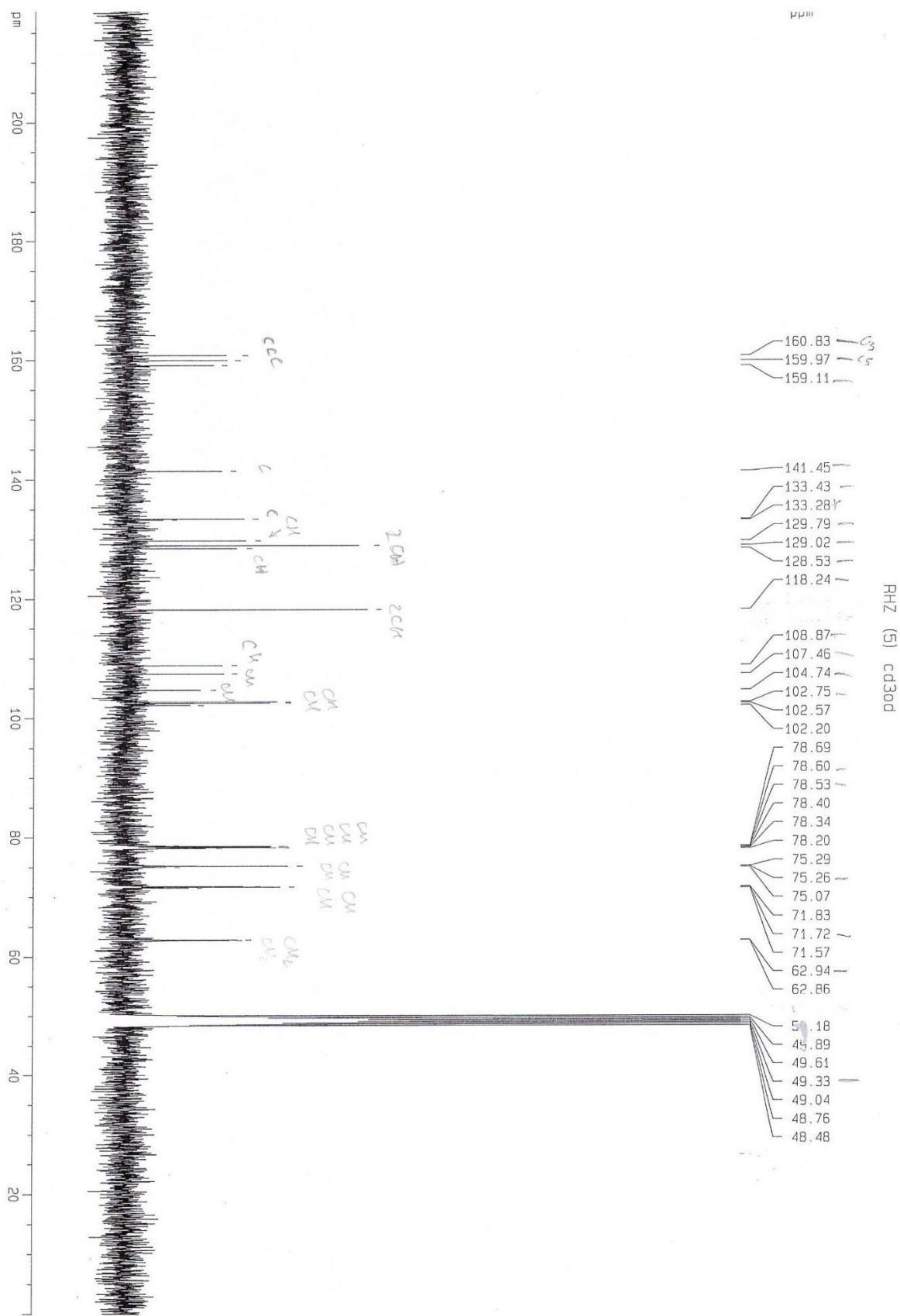


Figure S34. ^{13}C -NMR spectrum (75 MHz, CD₃OD) of resveratrol 3,4'-O-di- β -D-glucopyranoside (**114**)

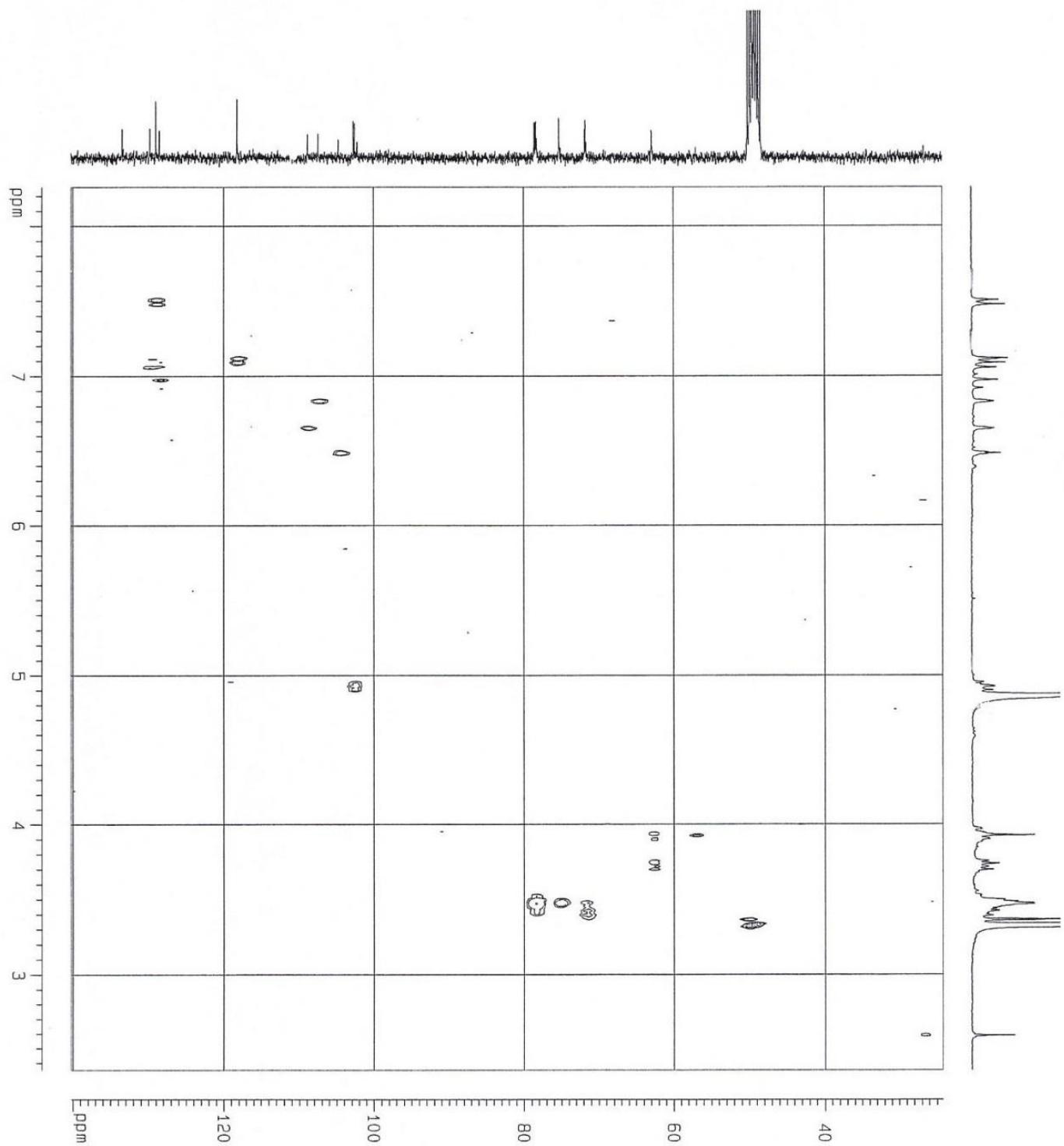


Figure S35. HSQC spectrum of resveratrol 3,4'-O-di- β -D-glucopyranoside (**114**)

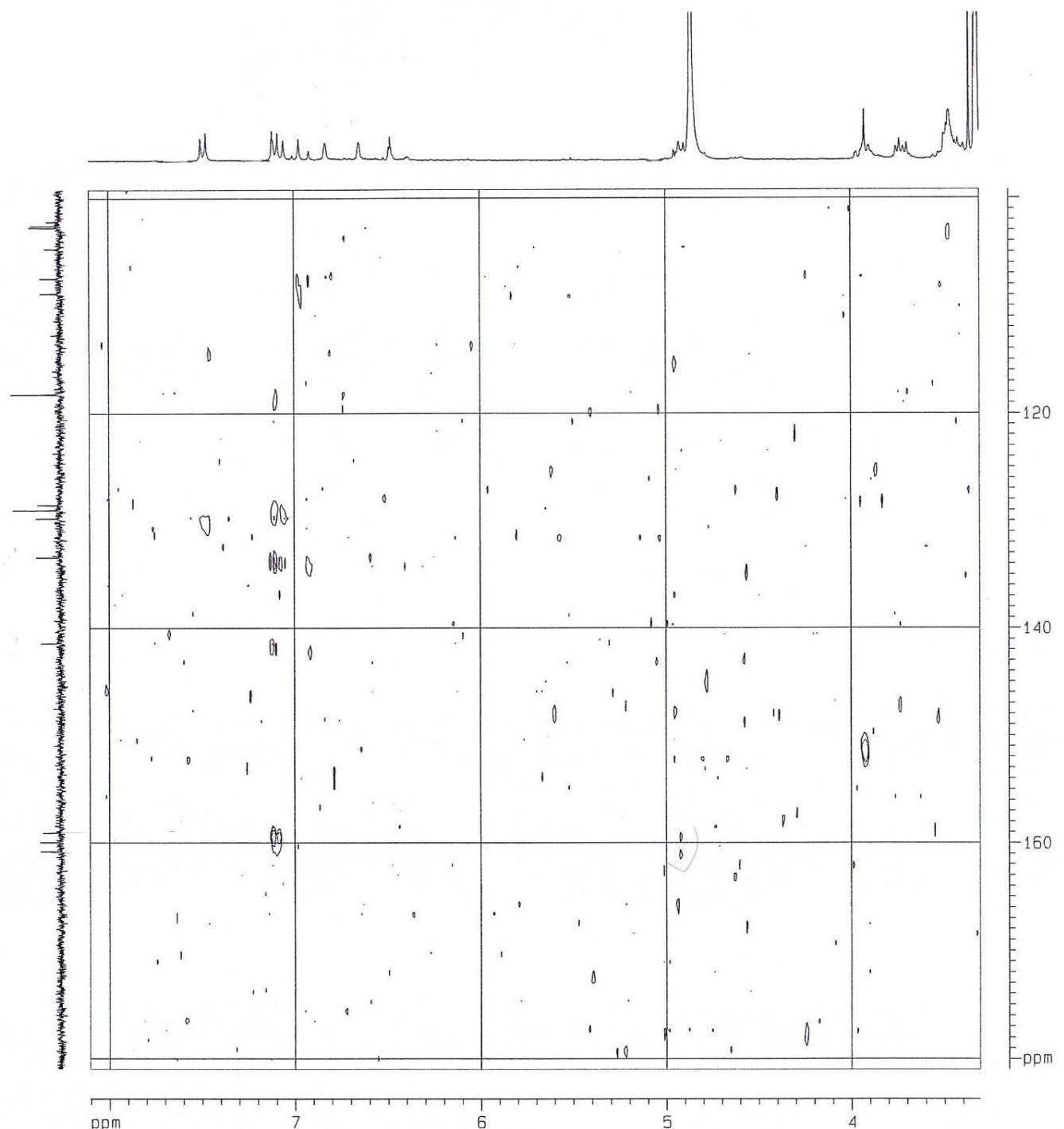


Figure S36. HMBC spectrum of resveratrol 3,4'-O-di- β -D-glucopyranoside (**114**)

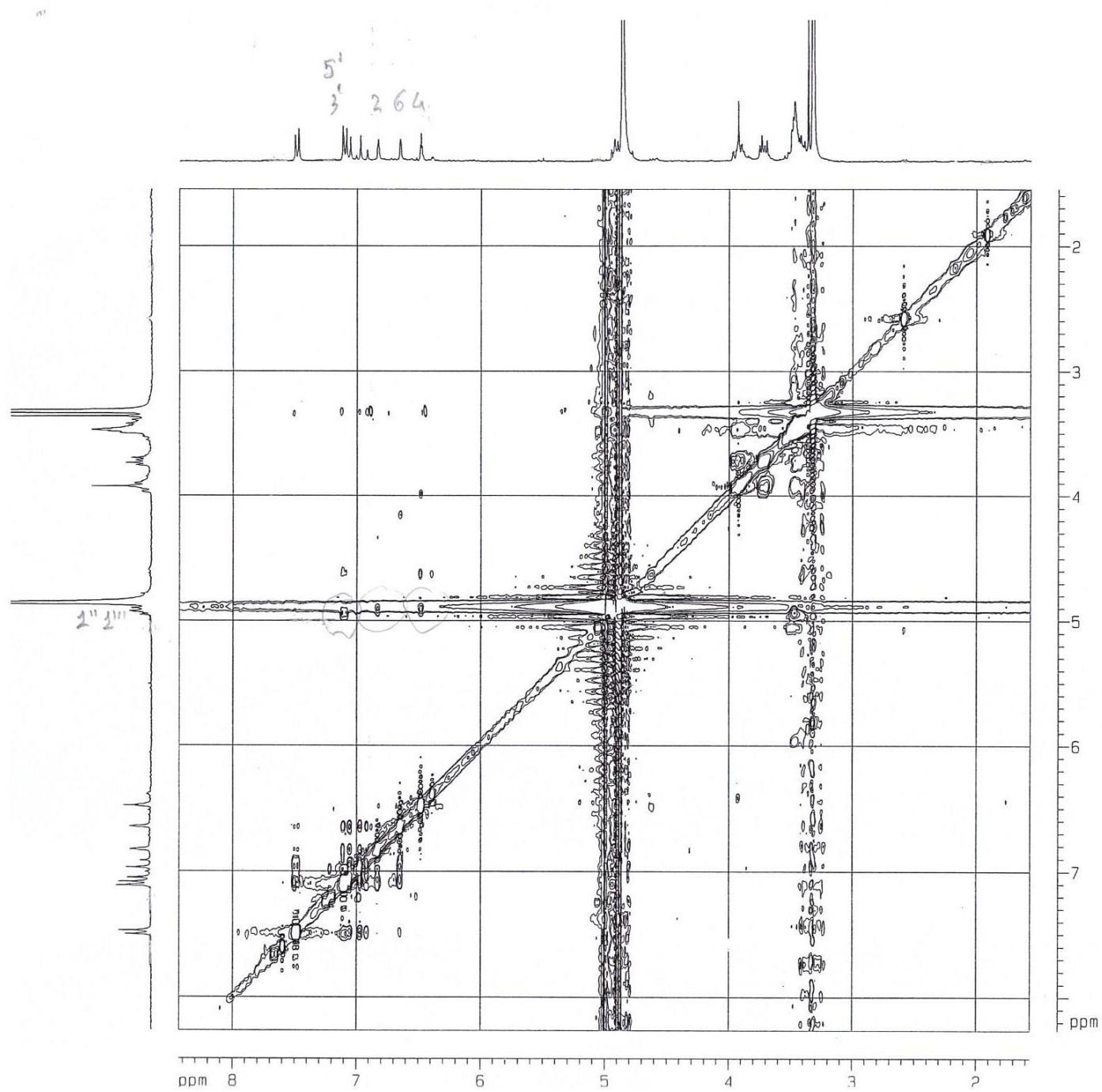


Figure S37. NOESY spectrum of resveratrol 3,4'-O-di- β -D-glucopyranoside (114)

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ESI sid=35.00 E Full ms
[80.00-1000.00]

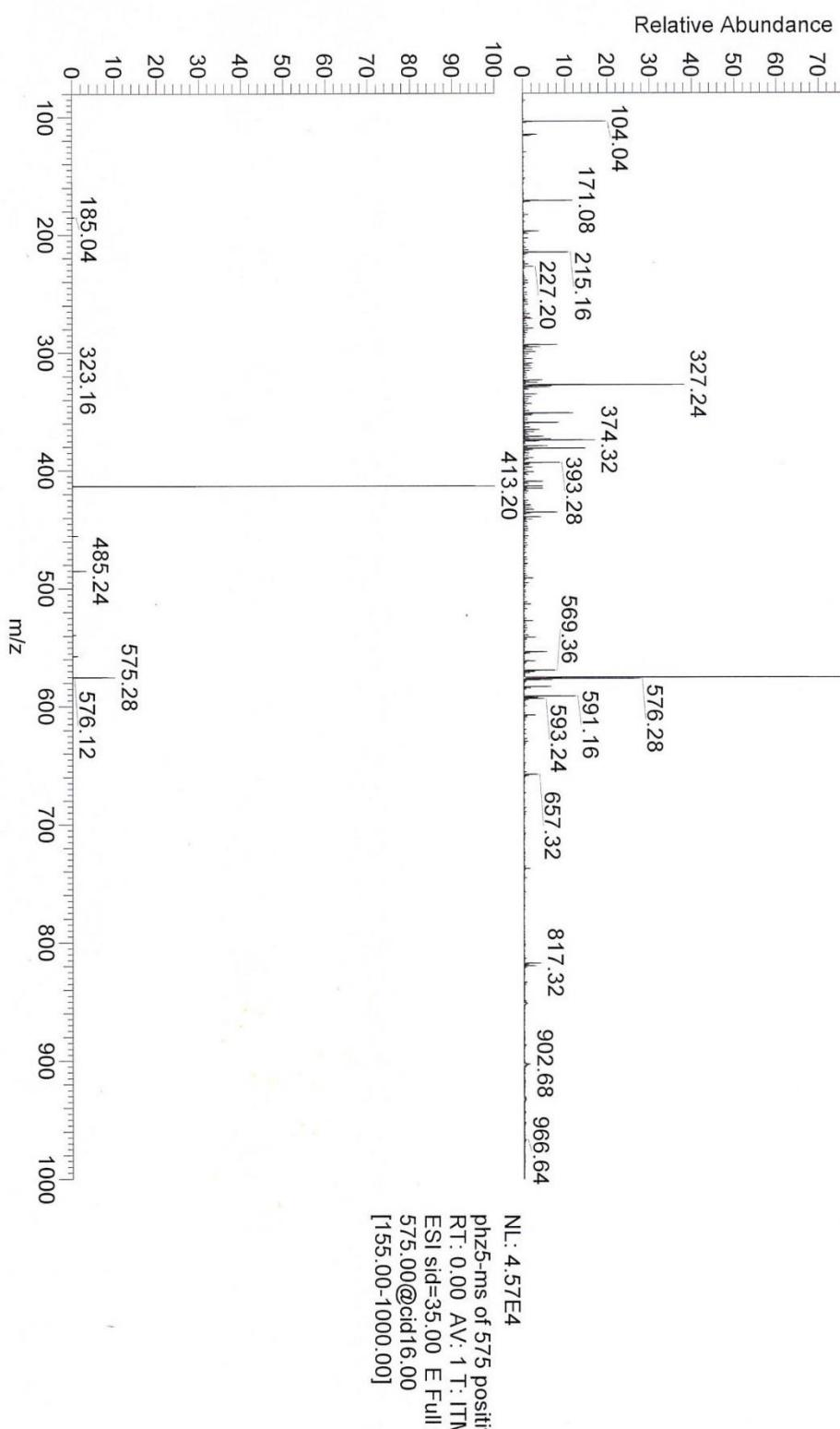


Figure S38. ESY-MS spectrum (positive ion mode) of resveratrol 3,4'-O-di- β -D-glucopyranoside (**114**)